

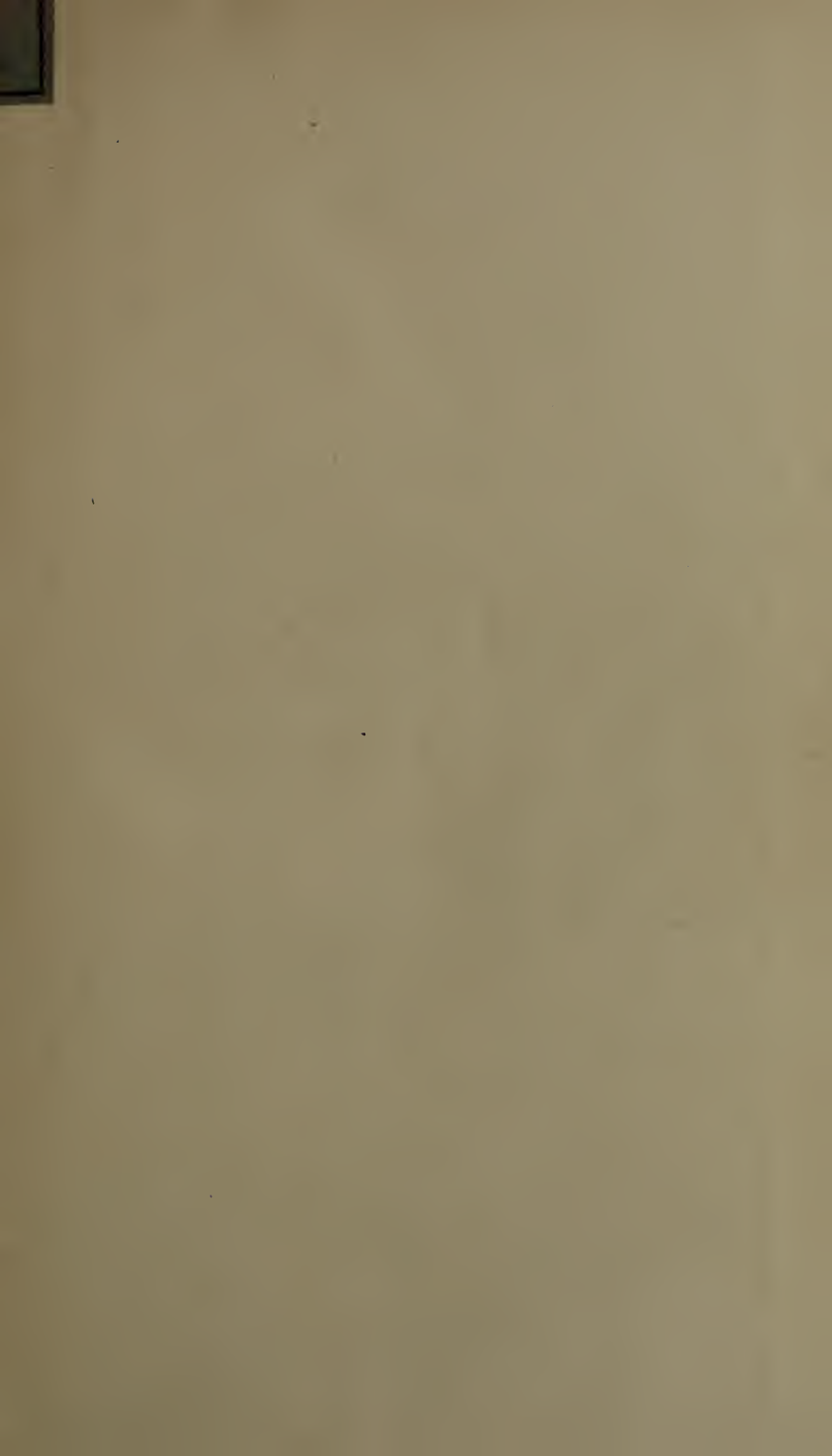
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REPORT

OF THE

BOARD OF METROPOLITAN PARK COMMISSIONERS.

—
JANUARY, 1901.
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BOSTON:
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Commonwealth of Massachusetts.

REPORT.

The Metropolitan Park Commission presents herewith its eighth annual report.

The year 1900, to which this report especially relates, has been marked by events having an important general bearing on the work entrusted to this Commission.

The work and plans of the Commission have been reviewed and examined during the year to an unusual extent. The appropriations finally made by the Legislature for the continuance of the work were contained in acts which, without hampering the reasonable discretion of the Board, stated very definitely the purposes for which they were intended. These appropriations were of two sorts: the first annual appropriations for care and maintenance of the reservations and parkways and expenses of the Board, to be included in the State tax for the year; and appropriations as additions to the previous park and boulevard loans for acquirements and work in completion of the portions of the Metropolitan Park System already authorized. A special commission was appointed by the Supreme Judicial Court, upon petition presented by this Board as required by the Park Act, to determine and report to the court an estimate of the proportions according to which, in its judgment, the cities and towns of the Metropolitan Parks District ought to make annual payments for the five years beginning with 1900 to meet the interest and sinking fund requirements of the park and boulevard loans, and to pay for the annual appropriation for care, maintenance and expense. The report of that commission has been returned into court, and is reprinted in the Appendix to this report.

These events have followed naturally from the requirements of the Park Acts and from the wish indicated by the Legislature of 1896, when it postponed a prior apportionment, that the year 1900 should be one of accounting, in which the District should review the work of this Board and its own responsibilities, and begin to meet annual expense. And, in view of these events, the Commission has confined its work during the year to completion of the acquirements and construction authorized and entered upon under the appropriations made prior to 1900, to the care and maintenance of the reservations and parkways already acquired, and has entered upon new work only to the extent authorized by the new appropriations of 1900. The subject matter of this report may therefore be similarly divided.

For convenience, it may be first noted that the Metropolitan Parks District consists of Boston and the surrounding cities within a radius of about 12 miles; that the park system includes parks or reservations, as authorized by chapter 407 of the Acts of the year 1893 and amendatory acts, and boulevards or parkways, as authorized by chapter 288 of the Acts of the year 1894 and amendatory acts. The appropriations made by these acts have been provided for by bonds of the Commonwealth, which are to be redeemed by the Parks District through annual payments to form a sinking fund for that purpose. They are classified as the Metropolitan Parks Loan, the Metropolitan Parks Loan, Series II., and Nantasket Beach Loan. The appropriations and incidental receipts which make up these loans may be briefly summarized as follows : —

	Park.	Boulevard.	Nantasket.
Appropriations prior to 1900.	\$6,125,000 00	\$2,700,000 00	\$600,000 00
Miscellaneous receipts, .	107,000 01	16,120 75	100 00
Appropriations, 1900, .	80,000 00	325,000 00	—
Miscellaneous receipts, .	47,679 76	5,597 02	4,875 00
Totals, . . .	\$6,359,679 77	\$3,046,717 77	\$604,975 00

The entire holdings of the Commonwealth acquired by this Board under the above acts and appropriations may be summarized at this date as follows : —

Under Park Acts.

Woods reservations : —		Acres.	Total.
Blue Hills,		4,857.96	
Middlesex Fells (in addition to 1,146.72 acres held by water boards),		1,881.35	
Stony Brook and West Roxbury Parkway, . .		619.82	
Beaver Brook,		58.35	
Hemlock Gorge,		23.11	
		————	7,440.59
River banks : —		Miles.	Acres.
Charles,	16.00	563.08	
Mystic,	5.00	289.55	
Neponset,	9.00	931.12	
	————	————	1,783.75
	30.00		
Seashore : —		Miles.	Acres.
Revere,	2.70	67.34	
Winthrop,	1.30	16.79	
King's, . . . . .	.30	3.92	
Nantasket,	1.00	24.51	
Quincy,	2.00	38.00	
Lynn, . . . . .	.40	4.09	
	————	————	154.65
	7.70		————
			9,378.99

Under Boulevard Acts.

Parkways : —		Miles.	Total.
Blue Hills,		2.250	
Middlesex Fells,		4.605	
Mystic Valley,		2.890	
Revere Beach,		5.240	
Neponset River,		1.113	
Fresh Pond, . . . . .		.540	
Lynnway to bridge over Saugus River, . . .		.460	
Nahant Beach,		2.230	
Furnace Brook,		2.750	
		————	22.078

The portion of the above acquirements made during the year 1900 and the construction and other work done during the same period are described in detail in the reports of the Secretary, Engineer and Landscape Architect, which accompany this report, and are in brief as follows : —

About 20 acres of land have been given for entrance roads along Whitmore Brook to the south-westerly corner of Middlesex Fells by Mr. Peter C. Brooks and Gen. Samuel C. Lawrence; about 11 acres of land, extending 2,725 feet along the banks of the Neponset River near Mattapan Bridge, in extension of a previous gift to the town of Milton, have been given by Mr. Amor L. Hollingsworth; and the town of Nahant has given the beaches along almost the entire length of both sides of the road from Lynn to Nahant.

Under the park appropriations, made prior to 1900, lands and rights have been acquired as follows: a single lot to widen the Revere Street entrance to Revere Beach; two lots in completion of the beach on the westerly side of the Lynn-Nahant road; the portion of King's Beach, known as Lynn Shore, between previous takings and Red Rock; Quincy Shore, between Moswetuset Hummock and Ruff's Hummock, with approaches from Hancock Street to the north and Merrymount Park to the south; Fuller's Wharf, on Charles River; and other small areas and restrictions in completion of previous takings on Charles River, Mystic River and Neponset River. Slight abandonments and sales have also been made for the improvement of the lines of previous takings, or to facilitate the adjustment of claims which presented complications unforeseen at the time the takings were made.

Under boulevard funds appropriated prior to 1900 slight takings and abandonments have been made during the past year along Revere Beach Parkway and Fellsway, and the land has been taken in Quincy for almost the entire length of Furnace Brook Parkway from Merrymount Park to the north-easterly corner of Blue Hills Reservation.

The appropriations under both park and boulevard acts made prior to 1900 have now been expended. Certain takings that were thought to have been provided for at the time these appropriations were made have been found to be impossible. These are the takings for the proposed parkway from Fresh Pond to Mystic River, and for a parkway from Neponset River along Brush Hill Road to the foot of Great Blue Hill. The Commission regrets its inability to acquire these lands, especially in the case of the Fresh

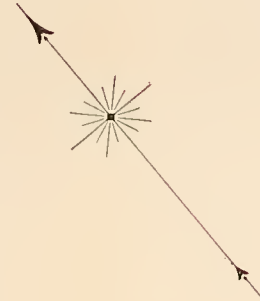
METROPOLITAN PARK COMMISSION

SCALES

The image shows two horizontal graphical scales. The top scale is labeled '0', '100', '500', and '1000 FEET'. It is a black and white bar scale with alternating black and white segments. The bottom scale is labeled '0', '1/8', and '1/4 MILE'. It is a solid black bar scale.

1900

Wm. T. Pierce, Engineer.



ATLANTIC

STRAITS
POND

This is a detailed historical map of Nantasket Beach, Massachusetts. The map shows the coastline of Hull Bay to the south and Sagamore Hill to the west. A large area in the center is labeled 'NANTASKET BEACH' and 'RESERVATION'. A road, 'NANTASKET ROAD', runs along the beach. To the east, 'NANTASKET AVE' is shown. A 'STEAMBOAT PIER' is located on the southern shore of the reservation. A 'NANTASKET BEACH BRANCH' of the 'N.Y.N.H.&H.P.R.' (New York, New Haven & Hartford Railroad) is shown running along the beach. Other labels include 'SURFSIDE', 'WEYMOUTH', 'ATLANTIC HOUSE', 'VALLEY BEACH', 'HULL ST.', and 'ROCKLAND HOUSE'. A compass rose is located in the upper left corner. The map is oriented with North at the top.



Pond-Mystic River Parkway, for which the town of Arlington has appropriated \$45,000, and private owners are ready to give a considerable portion of the necessary land.

Under Nantasket Beach appropriation, chapter 464 of the Acts of the year 1899, most of the holdings indicated by the map accompanying this report were acquired in March, 1900. These gave control of about one mile of the beach north from Atlantic Hill and of both sides of County Road for a half mile and of the road to the railroad station and steamboat landing. The remaining frontage on County Road is held by the railroad company under restrictions, and the control of County Road abutting on the reservation was also given to this Board by chapter 421 of the Acts of the year 1900. The reservation thus formed is somewhat different from that desired by those who urged the Legislature to direct its acquirement and control. In explanation, it may be said that this Commission decided, in the exercise of the discretion committed to it and after careful consideration of the problem, which it had had no occasion to study before the Legislature took action, that the isolated situation of this proposed reservation required that the lines of taking must be such as, while preserving the beauty of the beach, would first of all form a reservation independent of local conditions. The success in restoring order and cleanliness on the beach and in making it before the end of the year an attractive and popular resort seems to justify the general plan which was adopted and carried out as far as funds would permit. It is apparent, however, that the estimates for carrying out this work upon which the appropriation was based were inadequate. Although some of the largest properties were purchased upon even more favorable terms than those suggested at the hearings, others have cost more. Many claims for leases and unthought-of privileges and the expense of cleaning up the reservation and of providing the simple accommodations necessary for administration and public use were evidently not provided for. The Commission found that, even with the great care which it had exercised in obtaining the best available appraisals before making the takings, there was a possibility that the amount required for settlement of the claims would somewhat ex-

ceed the appropriation, and therefore reluctantly decided to abandon the northerly portion of the takings along the beach. The park commissioners of the town of Hull, however, refused to concur in the abandonment, so that, unless further appropriation is made by the Legislature, the Commission will be obliged to appeal to the Governor and Council, as authorized by law, to approve the abandonment.

Construction work of a permanent nature has been carried on under the appropriations made prior to 1900 as follows: the road, bridge and sea wall along Winthrop Beach have been completed; Revere Beach Parkway, between Main Street, Everett and Mill Street, Revere, has been completed to sub-grade; Blue Hills Parkway, from Blue Hill Avenue to Canton Avenue, with a short road in extension to Harland Street, has been finished; the driveway, dike and speedway along Charles River in Boston, Brighton District, are practically completed; and Fresh Pond Parkway in Cambridge is completed from Mt. Auburn Street through Lowell Memorial Park to Fresh Pond.

Under the appropriations made in 1900 for work in Winchester, a border road has been built along the westerly side of the Fells, completing a connection between Mystic Valley Parkway and Fellsway; the playground bought by the town of Winchester and made part of the Mystic Valley Parkway has been named Manchester Field, in remembrance of Forrest C. Manchester, and its grading partially completed; and one of the border roads of the Whitmore Brook entrance above alluded to is being built to a width of 20 feet. The work upon Manchester Field and the Whitmore Brook entrance will be completed in the early spring. The plans for building Revere Beach Parkway from Main Street, Everett, to the portion already completed at the southerly end of Revere Beach, and for building the new bridge across the Neponset River at Mattapan, and for the improvement of Charles River by building a driveway from the Arsenal to the town landing in Watertown, as contemplated by the bills making appropriations for these purposes, are well advanced, and the work which they call for can probably be completed in 1901.

In addition to the matters above noted, the Commission



NANTASKET BEACH RESERVATION — NORTH FROM ATLANTIC HILL.

has presented three special reports, required by acts of previous Legislatures, which are printed for record in the Appendix to this report; and also special reports required by committees of the Legislature and the apportionment commission; and has attended hearings before the Legislature and other public bodies, in regard to matters affecting the reservations and parkways as to which information was desired. The Commission itself has given hearings upon petitions for new acquirements and upon claims in suit when necessary. Hearings have also been given on three petitions for locations of electric street railways in the Blue Hills Reservation and Parkway, under the power given by chapter 413 of the Acts of the year 1900. These petitions are now under consideration, but no locations have as yet been granted.

The settlement of claims for lands taken has proceeded rapidly during the past year. Prior to December 1, 322 claims, aggregating \$1,025,497.30, were settled. Of these, 213 claims, aggregating \$452,798.99, were against Park funds; 20 claims, aggregating \$386,292.83, were against Nantasket Beach funds; and 99 claims, aggregating \$186,405.48, were against Boulevard funds. In these are included claims adjusted but unpaid at that date. There remain to be satisfied, including the adjusted but unpaid claims, 538 claims, of which 122 are in suit. Of these unsatisfied claims, 351 are against Park funds, 27 against Nantasket Beach funds and 160 against Boulevard funds. These claims arise mostly out of the takings of the past few years, but include also the final cases arising out of the earlier takings. Many of these are small, but the aggregate against the Park funds represents an amount which it can now be foreseen will exceed the balance of the funds in the treasurer's hands for their payment. The excess of the claims over the original estimates is chiefly due to the accumulation of interest against claims before settlement, verdicts in cases carried to trial, and to the fact that some of the appropriations were based upon inadequate preliminary estimates furnished by petitioners and taken as sufficient by the Legislature in making appropriations. On the whole, however, the estimates have proved reasonably accurate and the verdicts have

justified the awards made by the Commission, so that the present probable deficiency seems to indicate that all appropriations ought to be increased from 5 to 10 per cent. above a careful preliminary estimate of values, to provide for expenses and for contingencies which come with the preparation of detail plans, and for delay in settlement of claims. It would be unfortunate if the settlement of claims prior to the coming year should exhaust the balance now remaining in the treasurer's hands; and, in order to provide against such a contingency, the Commission recommends an appropriation for them, and will present a bill therefor.

The care and maintenance of the reservations and parkways has required more attention than in previous years. The use by the public has been greater; the problems presented by the newer reservations, especially Nantasket Beach and Charles River, have been unlike those of other reservations; and, at the same time, the year has been the first in which the expense of care and maintenance has been provided for and limited by a specific appropriation. The appropriations for these expenses for 1900 were made upon estimates furnished by the Commission, and were: for Parks, \$88,500; for Nantasket, \$6,500; for Boulevards, \$45,000. These appropriations have not been exceeded, but the experience of the year proved them to be somewhat inadequate. This experience, and the fact that some of the reservations and parkways were an expense for only a part of the year, and that new areas which received no attention last year will require expenditures in the coming year, have been taken into account in preparing estimates, and will require a somewhat increased appropriation for 1901. The organization of the forces in charge of the reservations and parkways and their work during the year, and that which seems to be required for the coming year, is set forth in the Secretary's report, and can be only briefly referred to in this report.

The older reservations and parkways are under practically the same superintendence and management as in previous years. As the forces employed in each have advanced in experience and proved ability, the newer reservations and parkways have as far as possible been placed under their

care, in an effort to keep the organization as simple as possible. The superintendent of Blue Hills now has charge of the Blue Hills Parkway and Quincy Shore and Furnace Brook Parkway. The superintendent of Stony Brook also has in his charge Neponset River and Neponset River Parkway lands. The superintendent of Beaver Brook has temporarily had charge of Lowell Memorial Park. The superintendent of Middlesex Fells has charge of Mystic River, the Mystic Valley Parkway and Fellsway and a portion of Revere Beach Parkway lands. The superintendent of Revere Beach has charge of Winthrop Shore, of Swampscott, Lynn and Nahant Shores and of the larger part of Revere Beach Parkway. Charles River is divided into the upper river, above Waltham, and the lower river. The lower river, including the speedway, is in charge of a superintendent, who during the last season was also placed temporarily in charge of Nantasket Beach, with a police force made up of men of experience from the other reservations. The upper river includes Hemlock Gorge Reservation and the boating section. The former was in charge of a caretaker, with police powers; and the boating section was during the summer in charge of a sergeant of police, with four police assistants in boats and a launch.

Aside from superintendence and policing, the expense and work required in the various reservations and parkways has varied according to the characteristics and needs of each. Upon the parkways by far the larger expense is occasioned by lighting and watering. The work required has been mainly that of repair, and of care varying from that necessary for the formal boulevards to that required in maintaining Mystic Valley Parkway, which is in effect a reservation or park; it has been, however, largely of a sort which could be done by a very small force under a single foreman. As the reservations are of three general classes, — the woods, the beaches and the rivers, — so the work required for their care may be broadly classified in the same way. In the woods reservations the work has been chiefly protection from fire, care of the roads and paths, a very small amount of new road building, and a limited amount of forestry work during the autumn and winter months. At Blue

Hills the nursery has been continued in limited form, and experimental cutting and charcoal burning has been carried on, in an effort to find some commercial use for refuse wood. At Middlesex Fells a small bridge has been rebuilt, the causeway at the Winchester Reservoir widened, slight repairs made to all of the roads, and necessary guard-rails renewed in more permanent form. At the beaches, the work during the busy part of the season has been chiefly that of maintaining as nearly as possible perfect cleanliness and good order. During the heated summer months the crowds were enormous, and repairs and improvements had to be made before and after these months. The bath-house at Revere Beach was used by 153,226 people, as against 115,716 people in 1899. An increase of amusement stands and shops bordering upon the reservation required increased attention of the police, but the usual good order was maintained. The increased use of the driveway made the inadequacy of the entrance roads more apparent than ever. At Nantasket Beach the shops and amusement stands, the great hotel and the bath-houses are upon the reservation itself. The renting of these was a matter of much concern and their supervision one of constant watchfulness. Considering the circumstances of sudden change of ownership and method of operation, they were all conducted in an excellent manner, but the great crowds who used them in August proved the inadequacy of the bath-houses and of the sanitary accommodations. Of the rivers, Charles River alone received any special care. The boating section about Riverside was policed during the summer for the first time; order and decent conduct were maintained, and nineteen persons rescued from drowning. Upon the lower river the speedway required a large amount of attention incident to a new reservation. It was not in satisfactory condition early in the season and was little used, but in the autumn months received a large use.

There is always difficulty in separating matters of care and maintenance from those of development, when both classes of work must be done by the same employees. During the past year the work on the reservations and parkways has



WINTHROP SHORE RESERVATION — THE DRIVEWAY.

been confined as far as possible to that required for mere maintenance. As a result, some much-desired work of improvement and development has been postponed. The Commission would be very glad if a moderate appropriation for development and improvements might be placed at its disposal; but, as there is no assurance that this can be done, it has felt obliged, in making its estimates for care and maintenance for the coming year, to include a few of the more necessary matters which might otherwise be charged to the loans. These represent, in addition to the amount required for care and maintenance in the past year, an item in the Blue Hills for rebuilding a portion of Hillside Street and in Middlesex Fells for a thorough repair of many of the roads. In the latter reservation the work carried on during the past three years by the Metropolitan Water Board has brought a most beautiful addition to the attractiveness and resources of the reservation, but has also occasioned an unusual wear and tear upon the roads, which, now that construction work by that Board within the reservation is practically completed, require immediate repair. All the parkways have received an increased use in the past year, which, with the unusual drought, has put them in a condition requiring immediate repair. These repairs will occasion considerable present expense, but will probably save much expense in subsequent years. The estimates for the coming year include amounts for the most necessary repairs to the parkways.

Three other matters seem to merit the attention of the Legislature in considering the work of this Board. The present rate of interest allowed by law upon claims, and the length of time allowed in which claimants may consider whether or not to bring suit, tend to increase litigation and to cause an undue expense to the Commonwealth. The present laws forbid insurance of buildings. As the District is to repay the loans upon which these buildings are a charge, it seems as if an insurance fund ought to be provided, in order that losses by fire may not require a new appropriation and increase of the loans for their payment. With the great increase of use of the parkways and completed roads upon which buildings are to face, there is an increasing demand

and necessity for watering and for permanent sidewalks, such as are provided by cities and taxed in part upon abutters under special laws. It is worthy of consideration whether a special law might not authorize such assessments by this Board, and provide for their collection through the agency of the cities and towns within which the parkways and roads are situated.

In brief, the acquirements authorized by the Park Acts have been made to the full extent justified by the appropriations. The settlements are so far advanced that it can be foreseen that additional funds will be required to meet the remaining claims. The acquirements authorized by the Nantasket Beach Act have been made to the full extent of the appropriations, and a small additional appropriation will be required to meet claims and to provide the simple accommodations needed by the public. The acquirements authorized by the Boulevard funds have been made to the extent of the appropriations, and the Board cannot out of present funds acquire the land for the Fresh Pond-Mystic River Parkway or for the Neponset River to Blue Hills Parkway which were contemplated by the appropriations.

The construction work authorized by the appropriations of 1900 is in part completed, and the rest of it will probably be completed in the coming year. The maintenance of the reservations and parkways already acquired and the expense of the Board must now be provided for each year by a special appropriation, and the work and expense limited by the amount of such appropriation.

The improvement and development of the reservations and parkways, including the improvement of the bath-houses and other accommodations at Nantasket Beach, can be carried on only by further appropriations. Such appropriations should be moderate in amount, made from year to year, and limited to actual necessities or to such work as the Legislature believes to be of present usefulness and economy. Until it is clear that these purposes are provided for and the expense cheerfully borne, the Commission cannot recommend further acquirements or work, in spite of its desire to see the entire plan recommended by it in previous reports provided

for. The present necessity is that of settling all claims and completing work already authorized, and of adequately caring for and conservatively improving the acquirements already made.

All of which is respectfully submitted.

WILLIAM B. DE LAS CASAS.

EDWIN B. HASKELL.

EDWIN U. CURTIS.

DAVID N. SKILLINGS.

ELLERTON P. WHITNEY.

DEC. 12, 1900.

REPORT OF THE SECRETARY.

Hon. WILLIAM B. DE LAS CASAS,

Chairman Metropolitan Park Commission.

SIR : — I herewith present my report for the year ending Dec. 1, 1900. It is sub-divided as follows: 1. Acquisition of lands. 2. Administration. 3. Miscellaneous. 4. Finances.

1. ACQUISITION OF LANDS.

Lands have been acquired by the Metropolitan Park Commission under the Park Act (chapter 407 of the Acts of 1893), under the Boulevard Act (chapter 288 of the Acts of 1894) and under the Nantasket Beach Act (chapter 464 of the Acts of 1899). It is, therefore, natural to consider the holdings of the Metropolitan Park System in that order, and convenient to note each reservation and parkway of the system and any changes which may have been made during the year in previous boundaries.

Blue Hills Reservation.

There have been no additions to this reservation since the last report. Its total area is 4,857.96 acres, of which 2,562.57 acres are in the city of Quincy, 1,499.42 acres in the town of Milton, 67.84 acres in the town of Braintree, 471.13 acres in the town of Canton and 257 acres in the town of Randolph.

Middlesex Fells Reservation.

An important entrance has been provided to the south-westerly section of the reservation by the generous gifts of Mr. Peter C. Brooks, who purchased the greater portion of the lands required for the purpose; and of Gen. Samuel C.

DIAGRAM OF THE PUBLIC OPEN SPACES OF THE BOSTON METROPOLITAN DISTRICT IN 1899.

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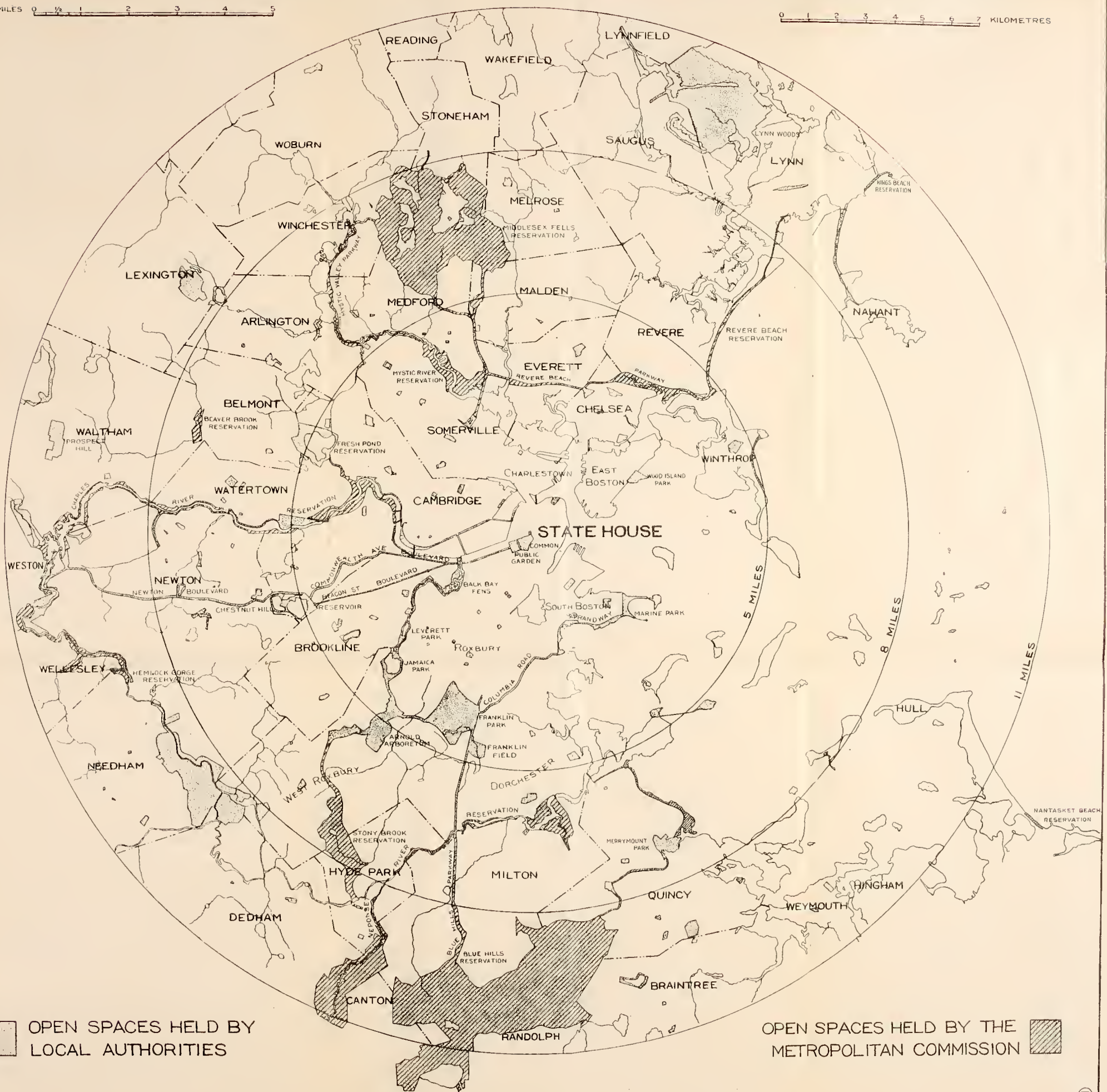
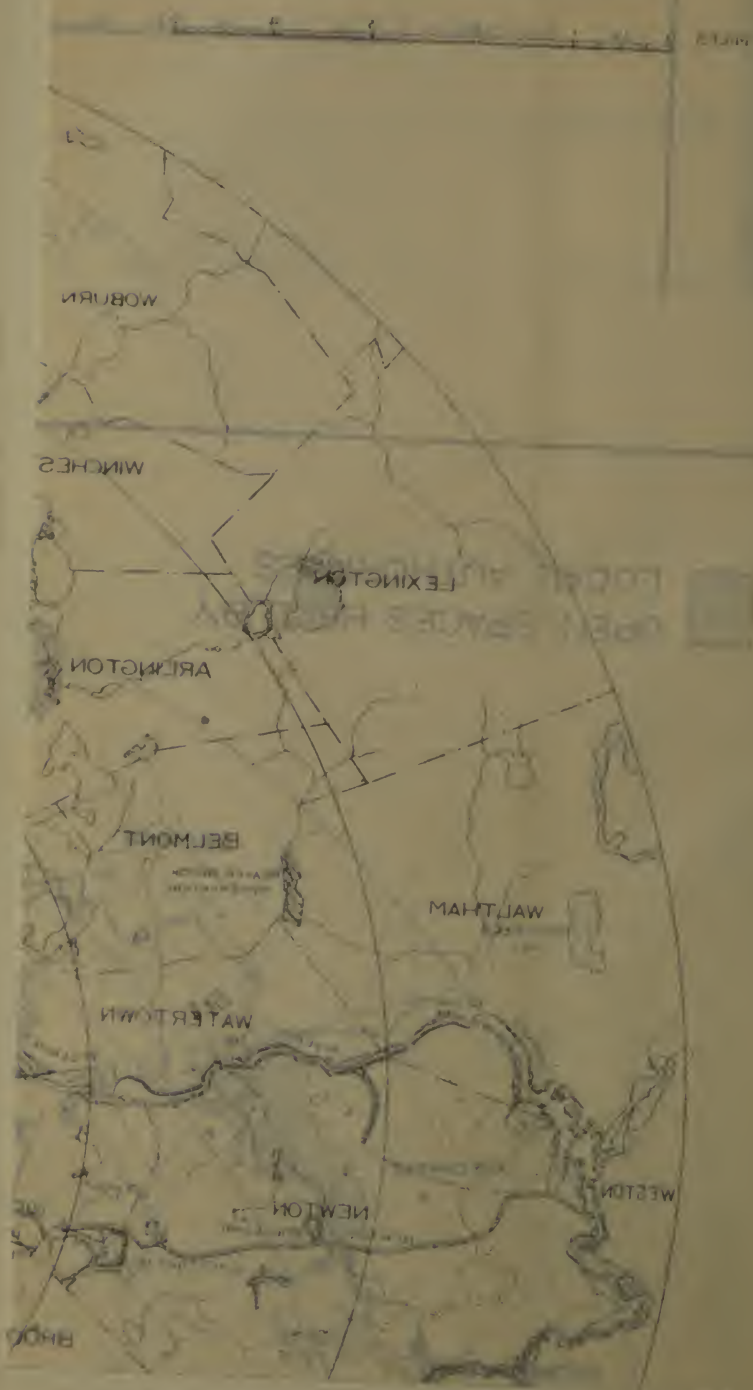


DIAGRAM OF THE PUBLIC OF



Lawrence, who has contributed that portion of his land through which the new roadway runs. The Whitmore Brook Entrance, as it has been named, begins at a point opposite Woburn Street on Winthrop Street, the principal highway between Medford and Winchester, and, following up the valley of the brook from which it takes its name, strikes the boundary of the reservation at the West Dam of the Winchester South Reservoir. The boundaries of the entrance follow the edges of this valley, along either side of which boundary roads are to be constructed, leaving the brook in the middle. The land acquired consists of 19.58 acres, of which 19.23 acres are in the city of Medford and .35 acres in the town of Winchester.

In co-operation with the Metropolitan Water Board, two isolated parcels of land have been added to the reservation, one the schoolhouse lot, containing .25 acres, on Pond Street in Stoneham, near Pepe's Cove of Spot Pond, which was no longer used for school purposes; and the other a vacant lot, containing 1.69 acres, between Woodland Road and Spot Pond, through which it was necessary to turn an existing cross road at the foot of the pond in carrying out the plan of the Water Board. With these slight additions the area of the Fells becomes 1,881.35 acres, of which 724.46 acres are in the town of Stoneham, 177.63 acres in the city of Melrose, 59.57 acres in the city of Malden, 669.08 acres in the city of Medford and 250.61 acres in the town of Winchester. In addition to the lands acquired by this Commission, there are 1,146.72 acres of lands in the Middlesex Fells held by the Metropolitan Water Board and the local water boards of Winchester and Medford, which have, by agreement with these boards, been placed under the care and control of this Commission, and are used by the public in the same manner and to the same extent as the park lands. For practical purposes, therefore, the Middlesex Fells may be considered as a reservation of 3,028.07 acres.

Stony Brook Reservation.

As a matter of economy of construction and a protection against a nuisance, a slight addition of 1.64 acres of low land was made to the Gordon Avenue Entrance to this reservation

in Hyde Park. This leaves the area of the reservation 463.82 acres, of which 195.16 acres are in the city of Boston and 268.66 acres in the town of Hyde Park.

West Roxbury Parkway.

No change has been made in the boundary of this parkway, which contains 156 acres, and extends from the Boston end of the Stony Brook Reservation at Bellevue Hill to Weld Street in Roslindale, where it joins a taking made by the Boston Park Commission between this point and the Arnold Arboretum. These lands were transferred to the Boston Park Commission in 1894, under an agreement by which their development is to be carried out by that Commission.

Beaver Brook Reservation.

The boundaries of this reservation remain the same as in the last report. Of its 58.35 acres, 15.58 acres are in the town of Belmont and 42.77 acres are in the city of Waltham.

Hemlock Gorge Reservation.

This reservation, at Newton Upper Falls, marks the end of the takings on Charles River. It consists of 23.11 acres, of which 4.27 acres are in the city of Newton, 14.24 acres in the town of Needham and 4.60 acres in the town of Wellesley. No change has been made in the boundaries during the past year.

Charles River Reservation.

The most important addition to this reservation has been the acquirement of Fuller's Wharf on Western Avenue in the Brighton District of Boston, which was taken in accordance with the direction contained in chapter 467 of the Acts of the Legislature of 1900. This was the only private frontage on the river on the Boston side between North Harvard Street and the upper Western Avenue Bridge. By the terms of settlement the former owners are allowed three years for the transfer of their business, at the expiration of which time this land will become a part of the Speedway section of the reservation. On the opposite side of the river an agreement for purchase and exchange of lands has been

made with the Commissioners of Cambridge Cemetery, by which a strip 2,328.24 feet in length along the river bank is acquired, thus completing the holdings on the left bank of the river from the United States Arsenal down to the Cambridge Hospital, the starting point of the Cambridge Park System. Going up the river, the next important change of lines has been at the Ætna Mills property, where an additional taking and abandonments were made to avoid unnecessary damages and facilitate settlement with the corporation. In Waltham, the Commission, for reasons of economy, has deemed it wise to abandon the strip of land on the left bank between Prospect Street and Moody Street. This land was in use partly for railroad purposes and partly for an ice plant, and the abandonment was desired by both parties. The action of the Commission in abandoning was not concurred in by the official representatives of the city of Waltham, but was finally approved by the Governor and Council, to whom the matter came on appeal. In the rear of Woerd Avenue a slight change in the line of a single owner was made to facilitate settlement. On the right bank in Waltham, near the Newton line and Auburndale Park, the remainder of Forest Grove has been acquired on favorable terms in settling for the portion originally taken. A beautiful spot has thus been protected, and the only suitable picnic grove on the river in the Waltham section has been secured. It has been quite largely used during the season. Slightly improved provision for the public would add much to its use. Coming into the Riverside region, a strip of land along the westerly side of Lily Point, originally planned to be restricted, has been taken in fee, as it involved no greater expense. On the right bank in the rear of Woerd and Crescent avenues restrictions have been imposed along the banks, which, while they leave the owners in full control and possession of their estates, restrict the land from any misuse. The land immediately under the Norumbega Tower and the tower itself have been reconveyed to the trustees, upon whom the duty of caring for it is imposed by Professor Horsford's will. On the opposite shore a strip of the bank along a private estate has been abandoned, because it is thought that a restriction will secure the full purpose of the

taking. Just below the Riverside station and between the Newton Boat Club house and the tracks of the Boston & Albany Railroad, the land on which a large boat livery stood has been taken. It has been leased for a long term to the former lessees, who have altered, enlarged and improved the buildings, and by their lease are obliged to conform to the rules and regulations imposed by the Commission. Near the railroad bridge at Newton Lower Falls portions of two estates on the Newton side have been abandoned. The destruction by fire of the chemical works of Billings, Clapp & Co. in Wellesley made it possible to acquire a strip of the bank where objectionable structures stood before. In the rear of the Dudley Mills a portion of the land taken appeared, from the search of title, to contain springs of commercial value to the mills, and the lines were changed so as to exclude them from the reservation. Along Washington Street at Newton Lower Falls the original taking included a hose house lot of the city of Newton. Plans have been prepared by the city for the widening of this street, and the Commission has contributed from the reservation a strip of land as an equivalent in value for the property taken from the city. At the Wales Street Bridge the remainder of the estate in Wellesley on the west side has been acquired in settling for the portion taken, which will permit the removal of an unsightly building. In the rear of Concord and Washington streets, restrictions of the same character as those above described have been imposed upon private estates backing upon the river, where no taking of the land was made. The portion of the river bank where it passes the Wellesley Water Works has been transferred back to the Water Board, at its request. In construction of the boundary road on the Newton side from Newton Lower Falls to Newton Upper Falls it has been found necessary to take certain portions of an unconstructed street, called Quinobequin Road, in order to extinguish possible outstanding rights in the same, and to establish the line of the road now built as the true line.

The Charles River Reservation now contains 563.08 acres, of which 143.43 acres are in the city of Boston, 38.07 acres in the city of Cambridge, 123.87 acres in the city of New-

ton, 38.20 acres in the city of Waltham, 75.21 acres in the town of Watertown, 77.19 acres in the town of Weston and 67.11 acres in the town of Wellesley.

Mystic River Reservation.

The remaining stretch on the river from Weir Bridge on the Arlington side down to the Somerville-Medford line, described in the last report, has been taken. It contains 24.01 acres, of which 15.18 acres are in the town of Arlington and 8.83 acres in the city of Somerville. The whole reservation (including the lands taken by the city of Medford, which are later to be transferred to this Commission for care and control) contains 289.55 acres, of which 15.18 acres are in the town of Arlington, 265.54 acres in the city of Medford and 8.83 acres in the city of Somerville.

Neponset River Reservation.

At the date of the last report the takings at the head of the reservation through the Fowl Meadows in Canton, Dedham, Milton and Hyde Park, and at the foot of the reservation in the Neponset Marshes below Milton Lower Mills in Boston and Milton, had been recorded, and plans of the takings between these points were so far advanced that they were fully described. Since that time these intermediate takings have been recorded in four sections. The first extends from the Hyde Park Water Works to Fairmount Avenue in Hyde Park, and the second includes portions of the banks between Fairmount Avenue and the Boston line. This section has recently been added to by the gift of Mr. Amor L. Hollingsworth, who, in addition to a strip of the river bank along the boundary of his homestead on Brush Hill Road, has presented to the Commonwealth a parcel of land between Brush Hill Road and the river adjoining the Milton Playground, a tract given several years ago by the same gentleman to the town of Milton. The entire gift contains 11.11 acres, and stretches along the river bank for a distance of 2,725 feet. The next taking was of a short section on River Street in Mattapan, Boston, near Mattapan Square. At this point the reservation is crossed by the Blue Hills Parkway at its junction with Blue Hill Avenue.

The last taking includes the Boston and Milton banks of the river so far as practicable from the Parkway down to Adams Street at Milton Lower Mills. The reservation includes 931.12 acres, of which 81.36 acres are in the city of Boston, 272.82 acres in the town of Milton, 265.41 acres in the town of Canton, 69.43 acres in the town of Hyde Park, 234.70 acres in the town of Dedham and 7.40 acres in the town of Westwood.

Revere Beach Reservation.

The old Atlantic House property at the corner of Revere Street and the reservation has been taken, to provide a safer and more convenient entrance by this important street into the reservation. The necessity of controlling this lot was made evident by the studies for the future development of Revere Beach from this point northward toward the Point of Pines. The sale of this property in the settlement of an estate made it seem wise to acquire the land before the old buildings standing thereon should be extensively repaired or replaced by more expensive structures. The lot contained 49,777 feet, and the total area of the reservation is now 67.34 acres, all of which is in the town of Revere.

Winthrop Shore Reservation.

The only changes in the lines of this reservation have been made by conveying several strips of land between the construction lines and the original lines of taking to adjoining owners. The total area is 16.79 acres, in the town of Winthrop.

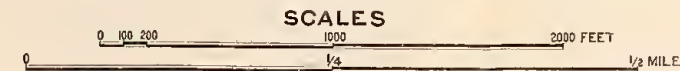
Quincy Shore Reservation.

The shore of Quincy Bay has been acquired from Moswettusset Hummock on the peninsula of Squantum to Ruff's Hummock at Black's Creek, a distance of 3.23 miles. The width of the taking is sufficient to provide for a roadway along the edge of the bay. At the northern end land has been acquired, partly through the gift of one of the owners, Mrs. Hannah C. Pope, for an entrance road from Atlantic close by the Hancock Street Bridge into Dorchester. At the southern end land for a similar entrance has been taken

COMMONWEALTH OF MASSACHUSETTS — METROPOLITAN PARK COMMISSION

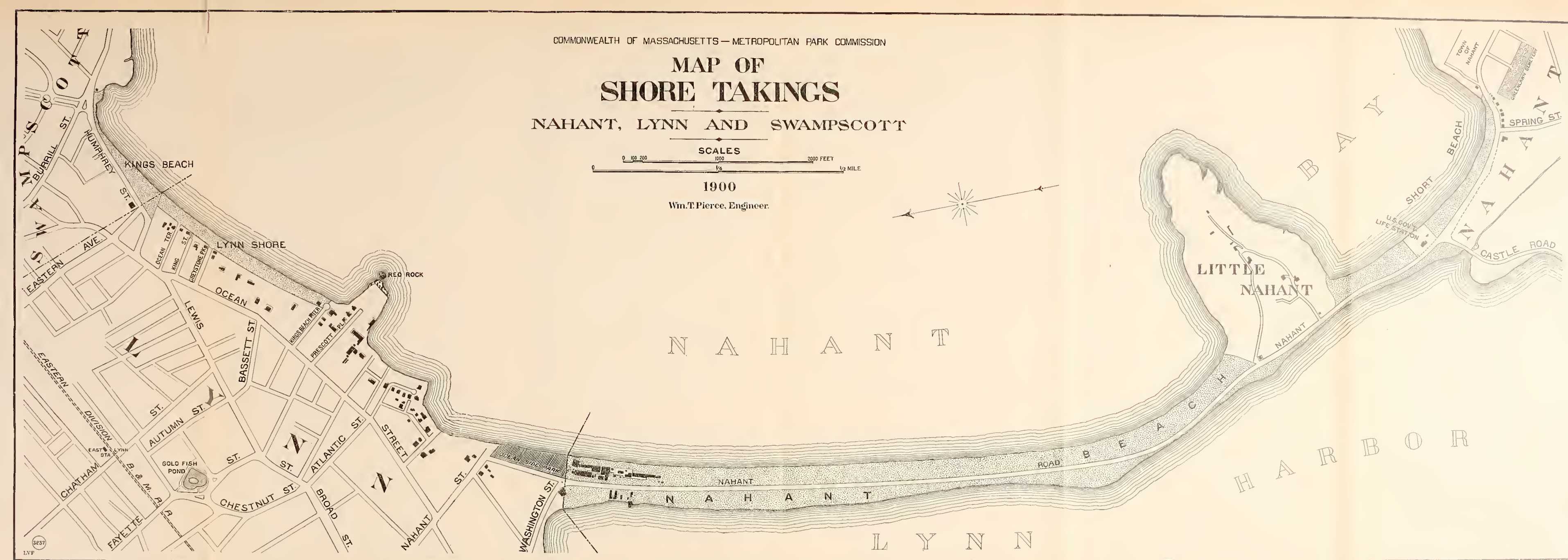
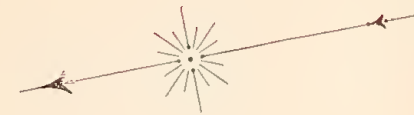
MAP OF SHORE TAKINGS

NAHANT, LYNN AND SWAMPSCOTT



1900

Wm.T.Pierce, Engineer.



through the property of the National Sailors' Home to Merry-mount Park, the central park of the city of Quincy. The area of this reservation, which is all in the city of Quincy, is 38 acres.

King's Beach Reservation.

This reservation, which was taken in 1895 and 1896, includes all of King's Beach which lies in Swampscott and a small portion in the city of Lynn. Its area is 3.92 acres, of which 3.30 acres are in the town of Swampscott and .62 acres in the city of Lynn.

Lynn Shore Reservation.

This reservation, which lies wholly in the city of Lynn, includes, substantially, the remainder of King's Beach lying between the last-named reservation and Red Rock, the rocky promontory where this beach ends. In addition to the beach itself, a strip of upland averaging about 100 feet in width has been taken for a roadway along the bank which rises gradually from the Swampscott line to the present end of the reservation. The amount of land acquired by this taking, exclusive of the beach, is 4.09 acres.

Nahant Beach Parkway.

The peninsula of Nahant is connected with the city of Lynn by a long and narrow isthmus, which protects Lynn harbor from the sweep of the open sea. Along the centre of this narrow strip of land runs the highway, which is the only approach to Nahant by land. To the east of the highway lies a beautiful sandy beach, which faces upon that part of Massachusetts Bay which makes in between Nahant and Swampscott. All of this beach which lies in Nahant was the property of the town, and of the smaller portion of this beach situated in Lynn a section of about 800 feet immediately adjoining Nahant was acquired by the city of Lynn a few years ago, and has been developed as Oceanside Park. Similarly, the land between the highway and Lynn harbor was the property of the town of Nahant from the Lynn line to Castle Road, with the exception of a small tract at the Lynn end. The town also controlled Short Beach, which lies between Little and Big Nahant, as they are locally

called, with the exception of a lot ceded to the United States for a life-saving station. The selectmen of Nahant, in pursuance of a vote of the town, have concurred in a taking by this Commission of these beaches, and, with the exception of the highway, of the adjacent lands in Nahant. By this action there is secured to the people of the Commonwealth forever the enjoyment of a beach which equals in beauty and value the two great beaches of the Metropolitan District, namely, those at Revere and Nantasket. The total length of Nahant Beach is 9,020 feet, of which 7,350 feet are included in this taking. Short Beach is 2,880 feet long, of which 2,580 feet are now controlled by the Commonwealth and the balance by the United States government. The total area of this taking, which is all in the town of Nahant, is 68.99 acres. The total length taken along the highway is 2.23 miles.

Furnace Brook Parkway.

Plans have been prepared and the greater part of the land has been acquired for connecting the easterly end of the Blue Hills Reservation with Merry Mount Park, and thus with the Quincy Shore Reservation. This parkway will be about 2.75 miles in length, and lies wholly in the city of Quincy. Starting from the extreme south-eastern corner of the Blue Hills Reservation, it follows, substantially, the valley of Furnace Brook until it reaches Hancock Street at a point opposite the park. It will cross the Granite Branch of the Plymouth Division of the New York, New Haven & Hartford Railroad near the West Quincy station by an overhead bridge, and will pass under the main line of this division at Newport Avenue alongside of the brook.

Revere Beach Parkway.

In connection with the construction of the parkway, which is now going on, it has been found advisable to acquire the remaining portions of several properties which were intersected by the lines for construction, where the result was, in effect, to destroy the total value of the estates. The land not required for construction has in several cases been transferred to abutting owners in part settlement for their claims,

and to mutual advantage. The total length of this parkway from Revere Beach to its junction with Fellsway and the Mystic River Reservation is 5.24 miles, of which .482 miles are in the city of Medford, 1.653 miles in the city of Everett, .814 miles in the city of Chelsea and 2.291 miles in the town of Revere.

Fresh Pond Parkway.

Several conveyances have been made of land outside construction lines, to carry out agreements made before the laying out of this parkway with the owners of the land taken, by which their ownerships are adjusted to the new lines. This parkway, which lies wholly in the city of Cambridge, is .54 miles long.

Mystic Valley Parkway.

The only change in area has been the conveyance of a small parcel of land in Winchester outside of construction lines to the adjacent owner, in part settlement for other lands taken from him. The total length of this parkway is 2.89 miles, 1.11 miles of which are in the city of Medford and 1.78 miles in the town of Winchester.

Blue Hills Parkway.

This parkway is wholly in the town of Milton, and is 2.25 miles long. No change in its boundaries have been made during the past year.

Middlesex Fells Parkway.

This parkway is divided into three sections: Fellsway, 2.442 miles long; Fellsway East, 1.114 miles long; and Fellsway West, 1.049 miles long,—a total of 4.605 miles, of which .74 miles are in the city of Somerville, 2.35 miles in the city of Medford and 1.515 miles in the city of Malden. There has been no change in its boundaries since the last report, except some slight changes in the restriction lines along Broadway Park in Somerville.

Neponset River Parkway.

The boundaries of this parkway are the same as last reported, the remaining section between Paul's Bridge and the Blue Hills Reservation still remaining to be acquired. Its

present length is 1.113 miles, of which .714 miles are in the town of Hyde Park and .399 miles in the town of Milton. The remaining portion of the parkway will be in Milton, and will probably be about 1.10 miles, making the total length of the parkway 2.213 miles.

Lynnway.

This parkway consists of a strip of land .46 miles long through the Point of Pines property in Revere from the southern end of the Revere Beach Reservation to the Saugus River. It is intended to connect by bridge with the section of the State highway already laid out but not yet constructed in Lynn from the Saugus River to Commercial Street.

Nantasket Beach Reservation.

The boundaries of this reservation, the greater part of which was acquired last winter, are most easily understood from the map which accompanies this report. Starting from the base of Atlantic Hill, all the land and beach is included which lies between County Road and the ocean to a point 438 feet north of the crossing of the New York, New Haven & Hartford Railroad. From this point only the beach between the railroad location and the ocean is included. From Atlantic Hill to the northern end of the reservation the line on the beach measures 5,375 feet. In addition to the beach, the adjacent lands on the westerly side of County Road have been taken on both sides of the way leading to the railroad station and steamboat wharf. The total area of the reservation is 24.51 acres.

The following tables summarize the areas of the reservations and the length of the parkways of the Metropolitan Park System:—

<i>Reservations.</i>							Acres.
Blue Hills, . . . . .	.	.	.	.	.	.	4,857.96
Middlesex Fells,* . . . . .	.	.	.	.	.	.	1,881.35
Stony Brook, . . . . .	.	.	.	.	.	.	463.82
West Roxbury Parkway, . . . . .	.	.	.	.	.	.	156.00
Beaver Brook, . . . . .	.	.	.	.	.	.	58.35

* Not including 1,146.72 acres of Water Works Reservations under the care and control of this Commission.

	Acres.
Hemlock Gorge,	23.11
Charles River,	563.08
Mystic River,	289.55
Neponset River,	931.12
Revere Beach,	67.34
Winthrop Shore,	16.79
Quincy Shore,	38.00
King's Beach,	3.92
Lynn Shore,	4.09
Nantasket Beach,	24.51
	<hr/>
	9,378.99

Parkways.

	Miles.
Blue Hills,	2.250
Middlesex Fells,	4.605
Revere Beach,	5.240
Mystic Valley,	2.890
Neponset River,	1.113
Fresh Pond, . . . . .	.540
Lynnway, . . . . .	.460
Furnace Brook,	2.750
Nahant Beach,	2.230
	<hr/>
	22.078

2. ADMINISTRATION.

There has been no change in the plan of organization adopted by the Commission several years ago. The general office and engineering department are located in the Congregational Building, 14 Beacon Street, within convenient distance of the State House. The Commission holds a regular meeting every Wednesday, and special meetings as occasion requires. The Chairman of the Board gives general attention to all work of the Commission. At the beginning of the year a special Committee, consisting of the Chairman and one or more members of the Commission, is appointed to especially consider matters relating to each reservation and parkway. The work of the Commission is carried on by departments reporting through their chief officer to the Secretary, who, as the executive officer of the Commission, has charge of the general office and is required to keep himself informed of all matters of detail. The following is a summary of what has been accomplished during the past year by these departments.

General Office.

The detail of the general office work has greatly increased from year to year with the development and opening up to public use of the reservations and parkways. This is particularly noticeable this year, which has required additional provision for the care of Nantasket Beach, the Riverside section of Charles River Reservation, Mystic and Neponset River and Winthrop Shore reservations and Fresh Pond Parkway, and has been marked by an increased use of the reservations and parkways previously acquired. This year also the expense of maintenance has been charged to special appropriations made for this purpose by the Legislature of last winter, and it has made additional book-keeping necessary. The system of accounts has been somewhat amplified, in order that the Commission may have more detailed information as to the items of cost of maintenance from year to year. A book-keeper with one assistant is employed upon the accounts. Another clerk has charge of the filing of all reports, requisitions, contracts, plans and other matters of recording, attends to all indexing, and in addition does a certain amount of stenography and typewriting. One stenographer and a messenger completes the office force.

Landscape Architects.

The Commission still retains the firm of Olmsted Brothers as landscape advisers. The gradual completion of the plan for the Metropolitan Park System has somewhat changed the character of their work for the Commission. Heretofore they have been mainly occupied in the study of the lines of taking to be followed in acquiring the lands for the reservations and parkways. Their services during the past year, however, have been mainly directed towards studies for the development of the system, as occasion has required. Their report, which follows, sets forth in detail their part in the year's work.

Engineering Department.

This year has seen the completion of several important contracts which have been carried out under the charge of this department. The most important construction has been

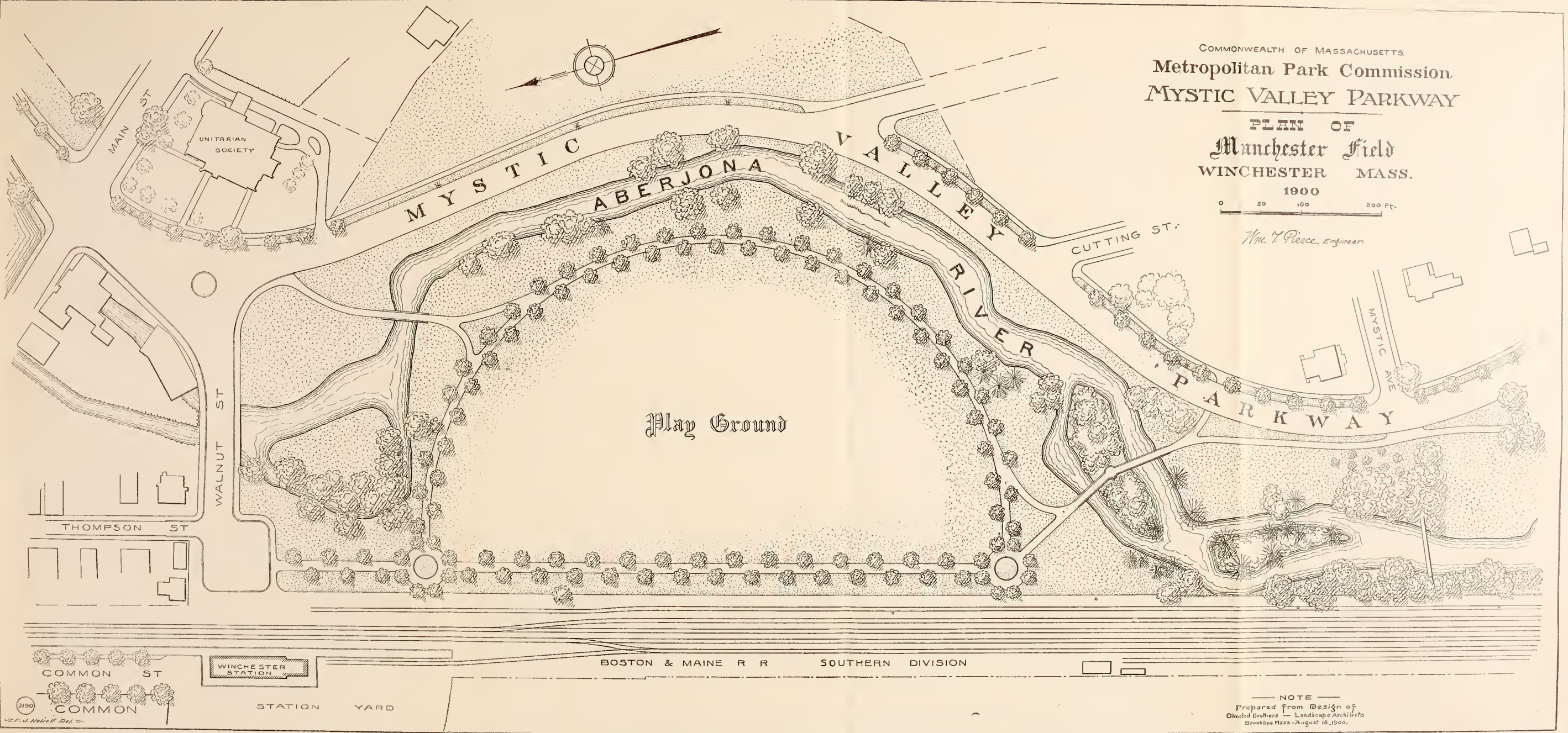
COMMONWEALTH OF MASSACHUSETTS
Metropolitan Park Commission
MYSTIC VALLEY PARKWAY

PLAN OF
Manchester Field
WINCHESTER MASS.

1900

0 50 100 200 Ft.

Wm. T. Pierce, Engineer



NOTE
Prepared from Design of
Olmsd Brothers - Landscape Architects
Brookline Mass. - August 18, 1900.

the building to sub-grade of a portion of the Revere Beach Parkway from Main Street in Everett through Chelsea to Mill Street in Revere, a distance of 2.73 miles. Construction plans, specifications and contracts are also in preparation for the surfacing and completion of the parkway from Main Street to Winthrop Avenue in Revere, from which point to the Revere Beach Reservation the parkway is already built. Fresh Pond Parkway in Cambridge has been entirely built since the last report, and a path built from Mt. Auburn Street to Gerry's Landing, to connect this parkway with the Charles River improvement of the city of Cambridge. The final work on the contracts for building Blue Hills Parkway to Canton Avenue in Milton and a short piece of road to Harland Street beyond was completed early in the spring. The Engineer is also engaged on plans for the bridge over the Neponset River at Mattapan, which will connect Blue Hills Parkway with Blue Hill Avenue in Boston. At Winchester work has begun on the playground in the Mystic Valley Parkway. This playground is on land contributed by the town when the parkway was first laid out, and has been named Manchester Field, in memory of the late Forrest C. Manchester, who, as a member of the local park commission and later of this Commission, showed especial interest in the acquirement and development of the Mystic Valley Parkway. The sea wall at Winthrop Shore was finished early in the year. A contract was at once made for the building of the roadway, the iron fence along the top of the wall and the railroad bridge. The work was completed and the road opened to the public on June 23, 1900. Work on the construction of a single roadway through the Whitmore Brook Entrance to the Middlesex Fells is under way, and will be completed in the spring. In the Middlesex Fells the causeway between the Middle and South Winchester reservoirs has been widened so as to give to the roadway across it a safe width, and the bridge at the South Dam has been rebuilt.

The important taking plans prepared by this department this year were those for Lynn Shore, Quincy Shore and Nantasket Beach reservations and Nahant Beach and Furnace Brook parkways. Considerable topographical work

has been done in the reservations at favorable seasons, and excellent progress has been made in marking boundaries with stone bounds. Considerable minor work of construction has been carried on under the charge of this department in the various reservations and parkways, for the details of which reference is made to the report of the Engineer, printed herewith. The progress made towards completion of takings of land has made it possible to considerably reduce the force employed in this department.

Law Department.

The work of this department, though important, calls for slight mention here. The Attorney-General's department, as heretofore, assumes charge of all matters in litigation. Preparation of contracts, takings, conveyances and general office work is carried on at the office of the Commission. The volume of work is large, especially in the preparation of deeds and releases of damages for lands taken, a large number of which have been required the past year.

Claim Department.

Since the date of the last report, 322 claims, aggregating \$1,025,497.30, have been settled, most of them without litigation. In the few cases which have been submitted to a jury the result has, on the whole, sustained the awards made by the Commission. The claims adjusted this year are divided as follows: reservations, — Stony Brook, 4; Hemlock Gorge, 1; Charles River, 58; Revere Beach, 3; Neponset River, 47; Winthrop Shore, 15; Nantasket Beach, 20; Mystic River, 37; Quincy Shore, 23; Lynn Shore, 11; Middlesex Fells, 4; parkways, — Mystic Valley, 7; Neponset River, 2; Revere Beach, 66; Furnace Brook, 5; Fresh Pond, 8; Middlesex Fells, 9; Blue Hills, 2.

There are now outstanding 377 claims for lands taken for the reservations, the majority of which are for lands included in the latter takings on the rivers of the district. These are divided as follows: Blue Hills, 1; Stony Brook, 6; Hemlock Gorge, 1; Charles River, 131; Revere Beach, 8; King's Beach, 1; Neponset River, 108; Winthrop Shore, 9;

Nantasket Beach, 27 ; Mystic River, 62 ; Quincy Shore, 18 ; Lynn Shore, 5.

There are also 161 claims pending for lands taken for parkways. It is to be noted that many of these claims are for inconsiderable areas of land, as compared with the large tracts required for the large reservations. They are divided as follows : Mystic Valley, 9 ; Neponset River, 5 ; Revere Beach, 91 ; Furnace Brook, 33 ; Fresh Pond, 3 ; Middlesex Fells, 19 ; Nahant Beach, 1.

Of the total 538 claims in reservations and parkways, 122 are in suit.

Superintendence.

The reservations and parkways have been cared for during the past year on the same plan of organization as heretofore, which has been found to be satisfactory and economical. Each reservation is in charge of a superintendent, who also is given the care of the parkways and undeveloped lands which lie nearest to his particular reservations. The superintendents receive their orders through the Secretary of the Commission and make their reports to him. A small force of regular laborers and a sufficient force of police are maintained in each reservation. Any important work of construction is carried on under the direction of the Supervisor of Construction. The present year has been an important one in the matter of administration of the reservations and parkways. Previous to Jan. 1, 1900, the cost of care and maintenance was by statute charged directly to the loans. Last winter, however, special appropriations, based on estimates furnished by the Commission, were made by the Legislature to cover the cost of care and maintenance for the year 1900. Care has been taken not only to keep the expense of maintenance within the estimates, but also to accumulate information upon which to base estimates for the coming year. Although the appropriations were not exceeded, the estimates for the coming year must be somewhat increased. Provision must be made for reservations and parkways added to the system since the last report. It also seems clear that it would be economical to provide in these appropriations for the speedy renewal of roads beginning to show wear, rather than to allow a point of deterioration to

be reached which would call for reconstruction. A greater amount of forestry work is desirable, and it must be carried on systematically from year to year, if any result is to be reached. The number of laborers employed regularly, compared with the area of the park system, has been small, — about 40 in the reservations and 12 in the parkways. For special work this force has had to be increased temporarily. It has been possible to carry on the regular routine work with this number, but not in a wholly satisfactory manner. The cost of other items of annual expenditure, such as police, watering, lighting, keep of horses and the like, were accurately estimated, and will require only such increase as is occasioned by the addition of new holdings. A slight increase in the item of labor and of materials for special work and repairs, however, would, in the opinion of your Secretary, give a satisfactory return to the District for the increased expenditure.

The details of the work and development in the reservations and parkways are as follows : —

In the *Blue Hills Reservation*, the largest of the wooded reservations, there has been the regular work of repairs of roads, care of paths and cutting of fireguards. The most important forestry work has been done in the 700 acres devised to the Commonwealth by the late Henry L. Pierce. This tract contains some of the best timber in the reservation, and the aim has been to give aid to the better growth. In pursuing this work a large number of tree poles were cut for use in supporting the young trees planted in the parkways. An experiment was also made in burning into charcoal a considerable amount of the waste cuttings which has heretofore been piled and burned at wet seasons of the year. It is too early to tell what the result of the experiment will be, but it is hoped that it will yield some return, as it is a convenient and safe mode of disposing of this otherwise useless and dangerous material. Work of landscape forestry, begun under the direction of the late Charles Eliot, has been continued in Marigold Valley and Wolcott Pines. The natural effect of these localities has not been sacrificed and the tree growth has been improved. Following up this line of work, an experiment has been made in the transplanting

of seedling pines. The great problem of this reservation, however,—the gradual replacing of a large amount of worthless sprout growth with seedling trees,—has not yet been seriously entered upon. The nursery, which was started under unfavorable circumstances last year, has been rearranged and a considerable number of trees will be realized. The location of the house occupied by the Superintendent, at the extreme western end of the reservation, was inconvenient and unsatisfactory. A house to be occupied by him has been built on Hillside Street, near the stable, workshop and other administration buildings, and the whole group of buildings arranged as permanent headquarters.

The reservation is so large and is approachable from so many directions that it is impossible to accurately determine the number of people who visit it during the year. Great Blue Hill and Hoosicwhisick Pond are well known to all, and in good weather visitors can nearly always be found there. There are many people, however, who seek the reservation for the wildness and solitude of the place, and purposely avoid the more visited sections. An interesting attempt to gain some idea of the number and residence of the persons visiting the reservation was made on two days of last September. The Superintendent and police force were instructed to observe the number of people, and, where possible without annoyance, to ascertain their domiciles. The report states that the number of persons in the reservation whose residences were ascertained was 1,380. It was estimated that four times that number visited the reservation on those two days. Among these were found citizens of the following places:—

Cities and towns in the Metropolitan District: Boston, Cambridge, Everett, Lynn, Malden, Medford, Newton, Quincy, Somerville, Braintree, Brookline, Canton, Dedham, Hyde Park, Milton, Needham, Wakefield, Wellesley, Weymouth; cities and towns outside of the District but in the State: Brockton, Easton, Fall River, Marshfield, Medfield, Medway, Newburyport, Norwood, Plymouth, Randolph, Salem, Sharon, Springfield, Stoughton, Walpole, Worcester; places outside of State: Providence, New York, Canada.

The *Blue Hills Parkway* and the lands taken for the *Furnace Brook Parkway* and *Quincy Shore Reservation* are in the charge of the Superintendent of the Blue Hills Reservation. No development of the lands in Quincy has been made, and there is nothing to report. The opening of the Blue Hills Parkway from Brook Road to Canton Avenue has already been mentioned. Arrangements have been made for speeding during the sleighing season on a portion of the easterly roadway, where there are no intersecting streets. The old bridge at Mattapan has required temporary repairs to carry it along until the building of the new structure. The westerly roadway from Mattapan Square to Brook Road is and must necessarily remain the principal traffic road for this section from Milton into Boston, and provision must be made for its occasional thorough repair.

In the *Middlesex Fells Reservation* similar routine work to that in the Blue Hills is required. Fireguards and paths must be cleared and interior roads kept in repair. In addition, the town roads which traverse the reservation are in the care of the Commission, and, as they are used to some extent for traffic, they require considerable repairs. The Metropolitan Water Board is now bringing to completion the great work which has been going on in the Fells during the last two years, by which Spot Pond has been transformed into a great storage basin. The raising of the banks of the pond nine feet has required changing the location of several roads and in some cases building sections of new roads in the neighborhood of the pond. These changes have been done by the Water Board on lines suggested by Olmsted Brothers. While all this work and the building of a huge pumping station and other buildings were going on, it did not seem wise to expend much for repairs upon the portions of the roads in the charge of this Commission; but now that the heavy teaming necessitated by a job of this size is completed, it is desirable that a considerable sum should be expended in putting the roadways in the Fells into permanent repair. This should be done at as early a date as possible, so that the usual large amount of summer driving and wheeling may be accommodated. Another section of border road has been built this year, which is of con-

siderable importance. It starts in Winchester, from the Mt. Vernon Street Entrance of the Mystic Valley Parkway, and runs along the south-westerly boundary of the reservation to the west dam of the South Winchester Reservoir, where it connects directly with the Meeting House Brook Road leading to the end of Fellsway West in Medford. These two great parkways are thus connected, and an uninterrupted pleasure road provided from Broadway Park in Somerville to the Mystic Valley Parkway. The section of boundary road just finished was built by the forces of the Reservation, under the direction of the Supervisor of Construction. The Whitmore Brook Entrance, mentioned before as under construction, will strike the reservation at the junction of these two border roads. This entrance brings the West Medford end of the Mystic Valley Parkway by agreeable town roads in close connection with the Fells, and provides this section of the District with a circuit drive of varied and beautiful character. A much-needed improvement has been effected this year, in the widening of the causeway which separates the middle and south Winchester reservoirs. The roadway across it, which before was not wide enough for two carriages to pass, has been amply widened and a substantial fence built on both sides. This is a part of the principal transverse road of the western section of the Fells, and one of the most used. The Dike Road along the western slope of Bear Hill and the principal entrance from Stoneham have been somewhat improved. A new bridge has been built over Whip Hill Brook. A small amount of forestry work has been done in the eastern section of the reservation, consisting mostly of rescue work among the seedling pines. The little house near Pepe's Cove, occupied by a sergeant of police, was removed in the course of the work of the Water Board, and the compensation allowed therefor has been used in building a police lodge in a neighboring location, less conspicuous but equally convenient.

The Superintendent of the Fells has charge also of the *Middlesex Fells* and *Mystic Valley Parkways*. In the former there is nothing to note outside of the routine of policing, lighting, watering, care of planting spaces and trees, and

ordinary repairs. In the latter parkway a portion of the Medford section has been resurfaced, and crossings have been provided at Mystic Avenue and Bacon Street in Winchester. Several rare and beautiful trees, given to the Commission for the purpose, have been set out in this parkway. A few ducks were placed on the Lower Mystic Pond, where they thrived and furnished much amusement and entertainment. The lands below in the *Mystic River Reservation* have been posted and to some extent policed, but no development has been undertaken beyond the removal of several of the old buildings.

In the *Stony Brook Reservation* the banks and slopes along Bold Knob Road, which was completed last fall, have been seeded. A little forestry work was done between Turtle Pond Road and the pond, opening up the view to great advantage. The raw bank along Brainerd Street in Hyde Park has been graded, a screen of trees started to shut off the view of buildings from the interior road, and a dump on land taken at the Gordon Avenue Entrance disposed of. The dam of the skating pond was repaired and the winter sport has already begun. In addition, there has been the usual work of keeping the fireguards clear. Forest fires have again been kept out of the boundaries of the reservation.

The Superintendent of Stony Brook Reservation has also used his small force of laborers in clearing up the banks of the *Neponset River Reservation*. Much-needed trimming of trees and clearing up of rubbish was done in Vose's Grove in the Neponset Meadows and along the river banks between Mattapan and Milton Lower Mills. Similar work was done in Hyde Park. In the Fowl Meadows portions have been burnt over and a line of willows planted to screen the fence along the trotting park at Readville. In the *Neponset River Parkway* nothing but the care of the buildings, several of which are rented, has been required.

The *Beaver Brook Reservation* has been visited this year by greater numbers than ever before. This is largely due to the fact that the cars of the Boston Elevated Railway Company bring their passengers now to Waverley station, only a few hundred feet from the reservation. To many the famous Waverley Oaks and the cascade of Beaver Brook are the

attraction ; but the greater number come for the charm of a rural spot, in which they are allowed every freedom consistent with the preservation of the natural beauty of the reservation. Estimates based on the numbers coming in picnics and on the transportation figures of the street railway would indicate that the reservation had been visited the past season by over one hundred thousand people. It is not strange that this small reservation of only 58.35 acres should have shown some wear at the end of the season. Some further provisions for the public convenience seem to be needed. It also is desirable that a few paths should be located, which, by guiding visitors to the interesting points in the reservation, will to some extent prevent the unnecessary treading and wearing out of some portions of the reservation. The two ponds afford good skating, and are largely used for the purpose. The noble trees are, as a whole, in good condition, but a severe injury was suffered by the largest elm in the gale of last September, — a heavy limb split away from the trunk. It has been shored up, and it is hoped may yet be saved for a considerable time.

The Superintendent of Beaver Brook Reservation also has had charge of *Fresh Pond Parkway*, *Lowell Memorial Park* and the Gerry's Landing Entrance to the *Charles River Reservation* in Cambridge. The parkway, which extends from Gerry's Landing to Fresh Pond, was opened November 2. The entrance from Mt. Auburn Street as it crosses into Lowell Memorial Park, leaving Elmwood on the right hand, is extremely picturesque. It serves already as an attractive approach to Kingsley Park and the grounds around Fresh Pond. The full use of this parkway, however, must await the development of the Charles River Reservation and the determination of a connecting parkway between Fresh Pond and the Mystic River. It will then be the link connecting the whole southern system of parks with those of the northern half of the Metropolitan District. In Lowell Memorial Park convenient cross-walks have been built, walls have been repaired, fences rebuilt and dead trees removed. At Gerry's Landing the pathway connecting the Cambridge Park improvement with the parkway has already been described.

The *Hemlock Gorge Reservation* at Newton Upper Falls is the beginning of the takings on the banks of the Charles River. Echo Bridge and the groves on the Needham bank attract every summer great numbers of visitors. There is a dam at each end of the reservation, and carries have been arranged around them for the canoeists who pass through the Gorge on trips up and down the Charles River. The extension of the car line from Newton Highlands brings people to the entrances of the reservation. Here, as at Beaver Brook, the woods are filled with parties of picnickers, to whom the place is well known. No especial work has been required during the year, beyond the ordinary repairs to paths, foot bridges and the few shelter buildings. At the upper end a small public bath-house has been built by citizens of this vicinity, in a location approved by the Commission, to give an opportunity for bathing to the children of the neighborhood.

The Superintendent of Hemlock Gorge Reservation has also had the care of the section of the *Charles River Reservation* between Newton Upper Falls and the railroad bridge at Newton Lower Falls. The most important improvement in this section has been the completion of a passable boundary road, already described, extending from Boylston Street to Washington Street. Some work has been done under the direction of the Superintendent in clearing up the dead wood and undergrowth between this road and the river. The gates in the dam at Upper Falls have been repaired and the site of the old stone mill graded and planted. On the Wellesley side the glue works which disfigured and polluted the river have been removed and the cellar holes covered up. At Lower Falls several old buildings have been torn down and the banks cleared up. Several pieces of river wall have been built or relaid, and at the former site of the burnt mill a small dam and bridge were built across the old raceway. The banks at the site of the burnt chemical works of Billings, Clapp & Co. were cleared of débris and covered with loam. In several places shrubbery has been set out.

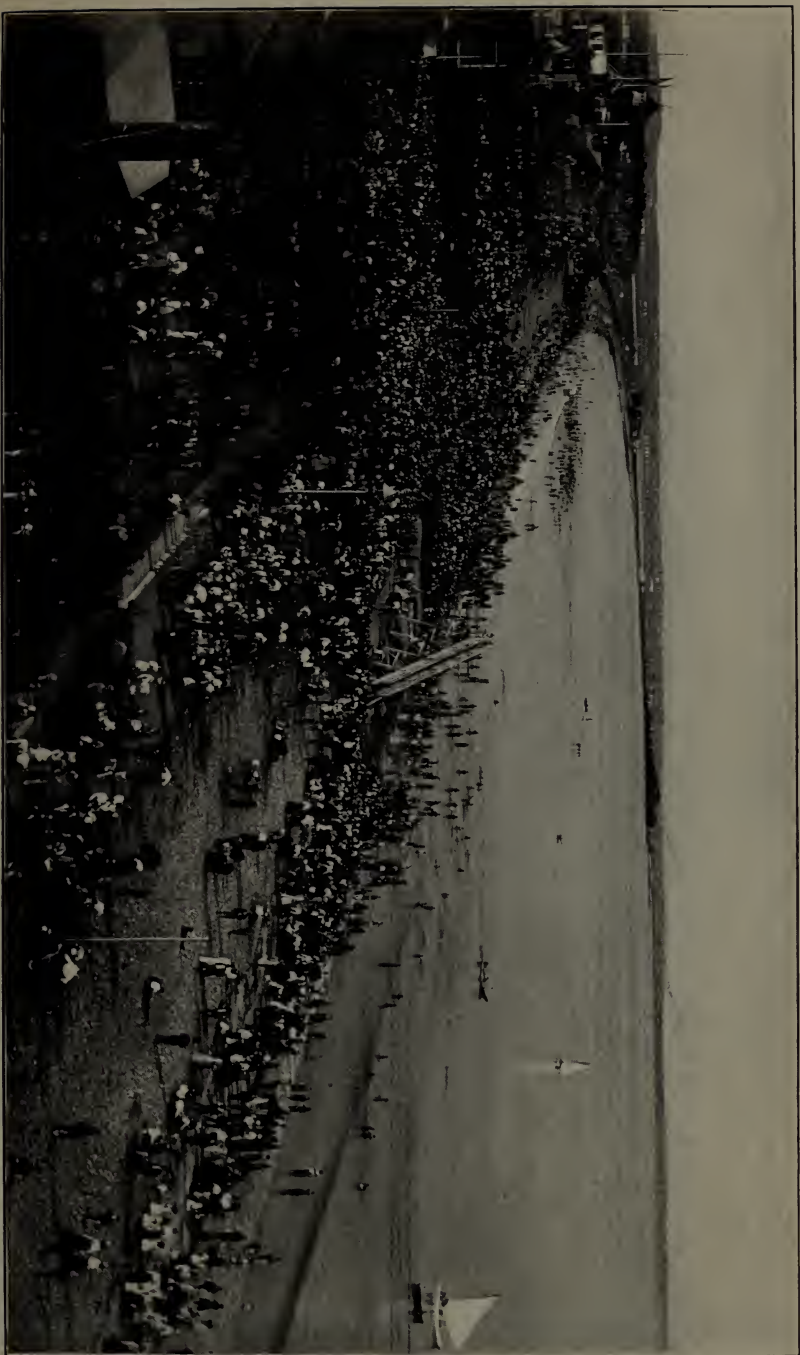
From the railroad bridge at Newton Lower Falls down to the dam of the Boston Manufacturing Company at Moody

Street in Waltham is the great boating region of the Metropolitan District. There are many private boat clubs and a number of large public boat liveries. Several steam launches ply between Waltham and Weston Bridge. There are hundreds of light boats, mostly canoes, owned by residents in the towns and cities along the banks. From May to October the river is alive with pleasure boats, and on pleasant evenings, on the occasion of a band concert at one of the clubs, the upper reaches of this section of the river are filled from bank to bank with pleasure boats of all descriptions. This form of amusement has been increasing very rapidly of late years, and has been largely stimulated by increased facilities for reaching Riverside and Weston Bridge by steam and electric cars. The limited space and the conditions attending boating made it possible for a few disorderly or thoughtless persons to create annoyance to a large number of people. Adequate policing was desired, but, for effective work, it was necessary to create a police authority on the river not limited to local jurisdiction, as the town lines in most cases coincided with the centre of the stream. The Legislature of last winter made a small appropriation for the policing of this part of the river by park police, and at the same time empowered the Commission to make rules and regulations governing the public use of the river. Headquarters were established in a building near Weston Bridge at Auburndale, and a sergeant and squad of police detailed for this duty. With the use of a naphtha launch and several small boats the river was patrolled from May 25 until September 30. The appearance of police seemed to have caused the immediate cessation of disorderly conduct, and not a single arrest was necessary. The police, however, found excellent opportunities for usefulness in rescuing persons from overturned boats and canoes. Nineteen persons were rescued during the summer. Four persons were drowned from capsizing canoes. This large number of accidents attracted public attention and created some discussion as to methods of prevention. No feasible way of protecting the public in this regard seems possible beyond warning the inexperienced. The keepers of boat liveries are desirous of co-operating in this matter,

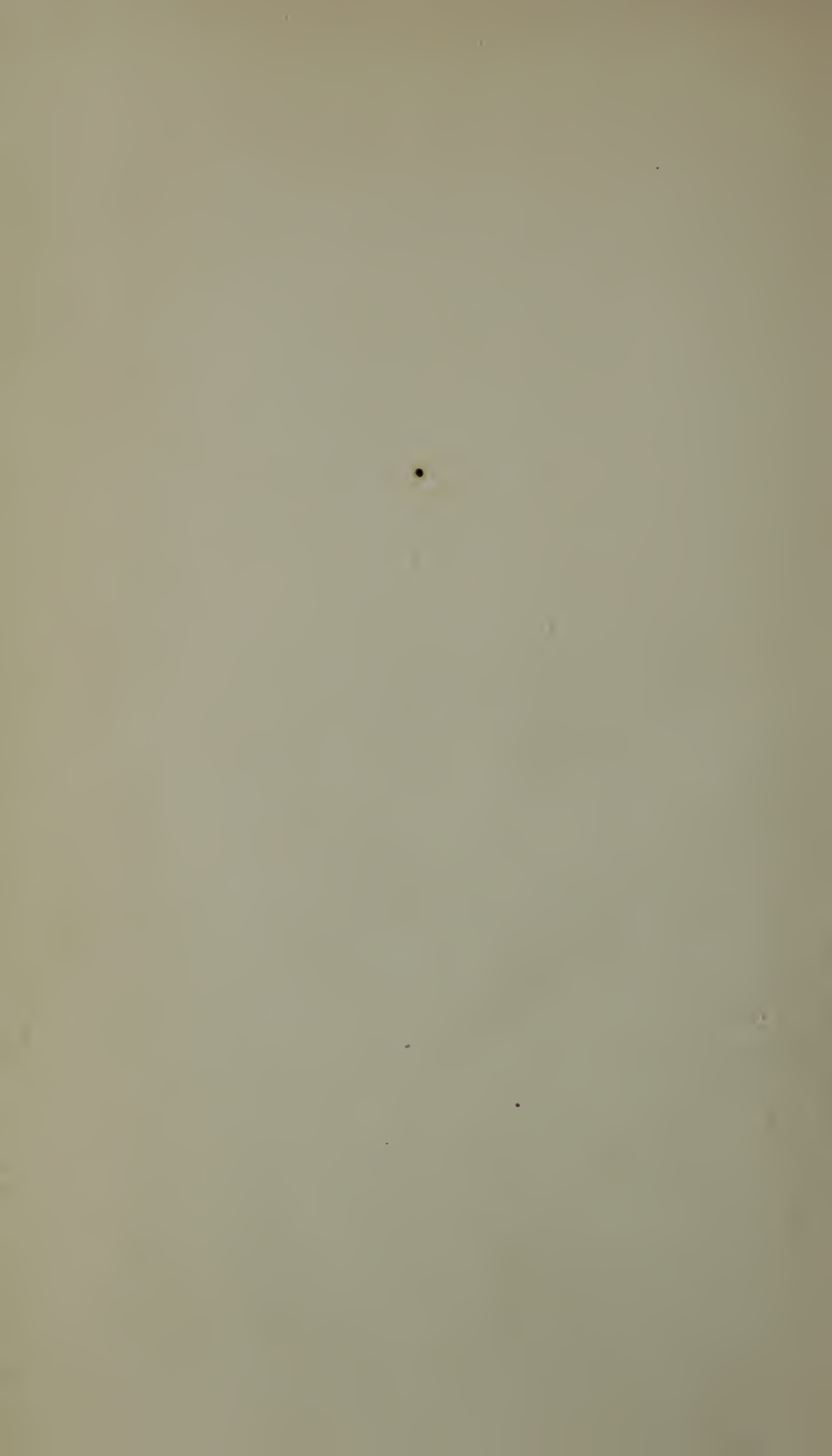
and, in addition to personal advice, have in many cases posted warning notices. It is to be hoped that the general attention which was called to this matter in the public prints last summer may also have some effect. In co-operation with the city of Waltham, the Commission has made arrangements for the establishment of stations along the banks of the river by the Massachusetts Humane Society, where life-saving apparatus can be found ready for use. It is expected that a similar arrangement can be made with the city of Newton the coming year. Several improvements along the banks in this section have been made this year. An old building opposite the Newton Boat Club has been removed and the banks graded and planted. In co-operation with the Norumbega Park Company, the cove near Weston Bridge is being dredged. A number of old buildings in Waltham, just above the Waltham Watch Factory, have been torn down, and at the Moody Street Bridge the old boat-house is coming down, opening the view up stream.

The Speedway section has seen a considerable amount of work done in the line of completing construction. It was anticipated that there would be more or less settlement of the marsh. The dike has in several places been brought up to established grade. The surface of the Speedway itself has been gradually improved, and this fall was pronounced by drivers to be in excellent condition. A half-mile exit was built, and has proved to be a very popular improvement. Harvard College has built a very substantial iron fence along its property line, which bounds upon this section of the reservation for 4,876 feet. The Harvard Boat House has also been built on land between the dike and Soldiers' Field, and it is already in use. Considerable planting has been done along the roadways and in several groups on the marsh.

At the *Revere Beach Reservation* the roadway and walks have been kept in order and in some places repairs made. Substantial repairs will be required next spring. Fences and iron work of shelters and light-posts have been painted, additional wooden seats built along the beach, and canvas shelters set out during the summer as heretofore. Opposite the bath-house a brick cross-walk was built. Some extension of this work and the building of similar cross-walks at Bath



REVERE BEACH RESERVATION — THE CARNIVAL.



Street is desirable. The care of the driveway from Charles Eliot Circle to Revere Street and of the beach between these two points during the summer season, both as regards policing and cleaning, increases every year, because their use increases proportionately. On pleasant Saturdays, Sundays and holidays an extra number of police have been required, — not for the repression of disorder, but for the safe guidance and handling of the enormous crowds of people. In August the people doing business in the buildings facing on the beach arranged for a “carnival week,” and were permitted, under careful restrictions, to use portions of the beach for athletic sports and popular amusements, such as balloon ascensions and diving horses. The mass of people on several occasions filled not only the sidewalks, promenade and ridge of the beach, but occupied the driveway as well, so that it became necessary to rope off the street and require carriages and wheelmen for a time to use Ocean Avenue in the rear of the reservation. After such days many cartloads of boxes, papers and other débris are collected from the driveway and the beach. The congestion which occurs at times will be greatly relieved when the development of the reservation is carried on from Revere Street to the Point of Pines, thus distributing the crowds over a larger area. From this latter section of the beach all remnants of the old railroad location have been removed this year, and the poison ivy which flourished near the entrance to the Point of Pines property has been pulled up. In the rear of the bath-house the raising of the grade of Ocean Avenue by the town of Revere necessitated a corresponding raising of the land of the Commonwealth. Sagamore Street, at the end of the bath-house yard, was partially constructed. On the vacant land adjoining the police station a small stable building and carriage shed have been built.

The bath-house was opened on June 15 and closed on September 16, — a period of 94 days. It was used by 153,299 bathers, of whom 98,930 were males and 54,299 females. On August 26 the number of bathers was 7,529, — the largest number yet recorded on a single day. During the same period 4,165 bicycles were checked.

The number of employees varied from 48 to 92. The

usual lifeguard was maintained, and 16 persons were rescued from dangerous predicaments. One death occurred in the water, probably induced by natural causes. In the emergency room 162 persons were cared for. The total receipts from the bath-house were \$34,374.30. Out of this the actual running expenses of the season have been paid. The State Treasurer, acting on an opinion of the Attorney-General, has credited the balance of receipts, amounting to \$11,993.13, to the Metropolitan Parks Loan. Under this ruling, however, this balance is still available for expenses chargeable to the bath-house. A considerable amount will be needed for the renewal of bath suits and repairs, and the balance will be required for improvement of the plant.

The section of the *Revere Beach Parkway* from Charles Eliot Circle to Winthrop Avenue, already built, has been lighted, watered and kept in repair. Trees have been planted, according to the original design, and are doing well. The rebuilding of the culvert at Sales Creek has been completed. In Everett and Chelsea a considerable number of buildings have been sold and removed from the portion of the parkway under construction.

The Superintendent of Revere Beach Reservation has also had charge of the *Winthrop Shore Reservation* since it was opened on June 23. Rules have been posted and a police force maintained. The road has been kept in repair. This fall a severe storm sent the spray over the wall, but, beyond some washing of the outer sidewalk, did no damage.

The only work done in the *Lynn Shore Reservation* has been the building of a fence along the line of taking and the pointing of some of the existing sea walls.

The greater part of the *Nantasket Beach Reservation* was acquired in March. Between that time and the middle of June all the old buildings between Atlantic Hill and Hotel Nantasket, including the unsightly chutes, were torn down and removed. A small piece of the old Tivoli Hotel was made into a shelter. Some changes were made in the hotel buildings, to adapt them better to general public use. An office and police station were arranged in the portion of the hotel facing on the arcade opening through to the beach. A band stand was built facing the hotel piazza. A few old

buildings north of the hotel were also removed. The roller coaster, merry-go-round, two bath-houses and Ocean View Hotel were left. The latter building was closed, but was burned to the ground on June 15, 1900. The cause of the fire is reported by the Fire Marshal as unknown. The owner of the roller coaster held a lease of the hotel corporation, expiring March 31, 1901, and was permitted to remain, paying the rent stipulated to the Commonwealth. The owners of the merry-go-round and bath-house were also allowed the privilege of conducting their business during the season, as part of the consideration arrived at in settlement for the lands taken from them. The hotel and photograph privileges for the season were let in each case to the highest bidder. In all cases it was stipulated that these privileges should be conducted subject to the rules and regulations imposed by the Commission for the government of the reservation.

On the opposite side of Nantasket Avenue and on the way leading to the railroad station and steamboat wharf there were old buildings, many of them out of repair. On the north side of the way all buildings were removed except a building built for servants' quarters for the hotel and a small cottage occupied by a watchman. The former building was altered over for barracks for the police and for Superintendent's residence. A women's sanitary was built a short distance farther north. The wooden block of three stores south of the way to the wharf was retained and let to the former tenants. The Commonwealth being the owner of the land on both sides of Nantasket Avenue for a considerable distance and of the land also on both sides of the way to the wharf, it seemed clear to the Commission that the matter of policing the reservation could be much simplified if the portions of the highways abutting on the lands of the Commonwealth were also put under the police jurisdiction of the Commission. This was provided for by the Legislature in chapter 421 of the Acts of 1900. On the land north of the way to the wharf a carriage stand was provided, and the Commission adopted rules governing the licensing of public carriages within their jurisdiction.

The reservation was put in charge of Superintendent

John L. Gilman, who was temporarily transferred from the Speedway on May 28 and remained in charge until the close of the season on September 6. A force of eleven officers, selected from the different reservations, were assigned to Nantasket for the summer season, and, as the service was temporary and at a considerable distance from their homes, rooms were provided for them in the barracks above mentioned, and satisfactory terms made for their meals with the lessee of the hotel. It is impossible to state with accuracy the number of people who visited the reservation during the season. It is probable that in the early part of the summer the numbers were not as large as heretofore. The character of the people was markedly different, and as the season advanced the numbers perceptibly increased, until, in the opinion of residents, former figures were fully equalled. As in the early days at Revere Beach, the increase of women and children was noticeable. Good order prevailed from the beginning to the end of the season. Only eleven arrests were made for breaches of the rules. A considerable number of arrests were made, however, for drunkenness, and a conviction was secured in every instance, — a fact which is likely to have a salutary effect in future as to this locality. There were forty-three accidents reported at the station, one of which was the drowning of a bather who ventured too far out. A brave attempt was made at rescue by an attendant at the bath-house, which nearly resulted in another fatality.

At the close of the season the reservation was put in charge of a sergeant of police with three patrolmen, who have been occupied in putting matters in the reservation in condition for the winter months.

3. MISCELLANEOUS.

A few matters of general interest relative to the work of the Commission should be noted as a matter of record.

In accordance with the provisions of chapter 419 of the Acts of 1899, the Attorney-General filed a petition in the Supreme Judicial Court for the appointment of a special commission to determine and make award of the proportion in which each of the cities and towns of the Metropolitan

Parks District should pay money annually for the next five years into the treasury of the Commonwealth, to meet the annual charges for sinking fund and interest on the Parks Loans and the cost of maintenance of the Metropolitan Park System. The Supreme Court appointed as Commissioners Charles Francis Adams of Lincoln, Thomas M. Stetson of New Bedford and John C. Hammond of Northampton. After several hearings and a general inspection of the system, these Commissioners filed their report with the court, by whom it was accepted. The towns of Brookline and Westwood, however, have appealed to the full court from the decree of the justice accepting the report, and the appeal is still pending. The appearance of the Park Commission in the matter was merely formal, the statute requiring the petition to be in the names of this Commission, except that it was called upon by the apportionment commission to furnish certain facts and figures for their information. As a matter of convenience, the award of the Commission is printed as an appendix to this report, with an estimate prepared in the State Treasurer's office of the actual amounts which would be required of each city and town according to the award.

During the session of the last Legislature this Commission filed three special reports required by previous acts of the Legislature. These were as to a road or boulevard between Boyden Square in Dedham and the Stony Brook Reservation (chapter 415 of the Acts of 1899), as to a road or boulevard between the Middlesex Fells Parkway at Mystic River and a point on Charles River near Cottage Farms (chapter 273 of the Acts of 1899), and as to a parkway or boulevard from the Point of Pines to Lynn Woods and thence to the Middlesex Fells (chapter 501 of the Acts of 1898). These reports are printed as an appendix to this report.

The Paris Exposition committee of this State requested the three Metropolitan Commissions (Sewer, Park and Water) to make suggestions for an exhibit of the work of the three Commissions in the District. An exhibit approved by the committee was arranged for under the advice of Messrs. Olmsted Brothers, the expense of which was

defrayed out of a special appropriation made for a State exhibit. The principal feature was a topographical model of the District which is of great interest and should ultimately be deposited in some public building in Boston. Photographs, plans and descriptive pamphlets were also provided. In the same booth and on its outer walls were exhibits of the work of the Transit Commission and the Terminal Company. The exhibit attracted considerable attention and was awarded the diploma of a gold medal.

4. FINANCES.

The following tables show in brief form the expenditures under the various park loans for the year ending Dec. 1, 1899 :—

METROPOLITAN PARKS LOAN.

Blue Hills Reservation :—

Land,	\$3,720 00	
Miscellaneous,	11,737 65	
	<hr/>	\$15,457 65

Middlesex Fells Reservation :—

Land,	\$1,220 50	
Miscellaneous,	12,702 01	
	<hr/>	13,922 51

Revere Beach Reservation :—

Land,	\$103 00	
Miscellaneous,	29,867 23	
	<hr/>	29,970 23

Stony Brook Reservation :—

Land,	\$9,478 34	
Miscellaneous,	2,157 99	
	<hr/>	11,636 33

Beaver Brook Reservation :—

Miscellaneous,	\$154 53	
	<hr/>	154 53

Hemlock Gorge Reservation :—

Land,	\$6,154 00	
Miscellaneous,	740 62	
	<hr/>	6,894 62

Charles River Reservation :—

Land,	\$191,851 00	
Miscellaneous,	23,660 63	
	<hr/>	215,511 63

Neponset River Reservation :—

Land,	\$58,583 89	
Miscellaneous,	16,172 00	
	<hr/>	74,755 89

Mystic River Reservation:—

Land,	\$66,928 50
Miscellaneous,	7,433 54

 \$74,362 04

Lynn Shore Reservation:—

Land,	\$80,191 40
Miscellaneous,	724 82

 80,916 22

Quincy Shore Reservation:—

Land,	\$31,019 00
Miscellaneous,	4,606 92

 35,625 92

Winthrop Shore Reservation:—

Land,	\$19,984 00
Miscellaneous,	115,949 22

 135,933 22

King's Beach Reservation:—

Miscellaneous,	\$517 00
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 517 00

General expense,	13,888 89
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 \$709,546 68

METROPOLITAN PARKS LOAN, SERIES II.

Blue Hills Parkway:—

Land,	\$1,626 00
Miscellaneous,	39,090 50

 \$40,716 50

Middlesex Fells Parkway:—

Land,	\$4,900 40
Miscellaneous,	8,714 16

 13,614 56

Mystic Valley Parkway:—

Land,	\$16,075 25
Miscellaneous,	11,978 37

 28,053 62

Revere Beach Parkway:—

Land,	\$159,784 82
Miscellaneous,	151,819 25

 311,604 07

Neponset River Parkway:—

Miscellaneous,	\$859 34
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 859 34

Fresh Pond Parkway:—

Land,	\$23,053 21
Miscellaneous,	20,434 57

 43,487 78

Furnace Brook Parkway:—

Land,	\$1,044 00
Miscellaneous,	1,620 02

 2,664 02

Lynnway:—

Miscellaneous,	\$39 81	
	<hr/>	\$39 81

Charles River Speedway:—

Miscellaneous,	\$52,616 77	
	<hr/>	52,616 77

Middlesex Fells Roads:—

Miscellaneous,	\$3,847 56	
	<hr/>	3,847 56

Stony Brook Roads:—

Miscellaneous,	\$450 25	
	<hr/>	450 25

Middlesex Fells and Lynn Woods:—

Miscellaneous,	\$207 77	
	<hr/>	207 77

General expense,		12,943 92
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\$511,105 97

NANTASKET BEACH LOAN.

Land,	\$135,688 83	
Miscellaneous,	27,914 67	
	<hr/>	\$463,603 50

The following tables show the total amount expended in each loan and the cost of each reservation and parkway to date, and the amounts charged by the Auditor's Department to meet the sinking fund and interest requirements to Jan. 1, 1900:—

METROPOLITAN PARKS LOAN.

Blue Hills Reservation:—

Land,	\$356,617 79	
Miscellaneous,	235,085 90	
	<hr/>	\$591,703 69

Middlesex Fells Reservation:—

Land,	\$679,631 98	
Miscellaneous,	204,528 68	
	<hr/>	884,160 66

Revere Beach Reservation:—

Land,	\$1,117,778 29	
Miscellaneous,	564,055 62	
	<hr/>	1,681,833 91

Stony Brook Reservation:—

Land,	\$279,088 87	
Miscellaneous,	74,005 60	
	<hr/>	353,094 47

Beaver Brook Reservation:—

Land,	\$29,819 29	
Miscellaneous,	19,661 85	
	<hr/>	\$49,481 14

Hemlock Gorge Reservation:—

Land,	\$53,254 00	
Miscellaneous,	14,401 33	
	<hr/>	67,655 33

Charles River Reservation:—

Land,	\$1,219,915 16	
Miscellaneous,	112,001 12	
	<hr/>	1,331,916 28

Neponset River Reservation:—

Land,	\$93,165 69	
Miscellaneous,	23,543 01	
	<hr/>	116,708 70

Mystic River Reservation:—

Land,	\$66,928 50	
Miscellaneous,	10,605 44	
	<hr/>	77,533 94

Lynn Shore Reservation:—

Land,	\$80,191 40	
Miscellaneous,	724 82	
	<hr/>	80,916 22

Quincy Shore Reservation:—

Land,	\$31,019 00	
Miscellaneous,	4,606 92	
	<hr/>	35,625 92

Winthrop Shore Reservation:—

Land,	\$19,984 00	
Miscellaneous,	156,890 66	
	<hr/>	176,874 66

King's Beach Reservation:—

Land,	\$22,347 21	
Miscellaneous,	1,159 13	
	<hr/>	23,506 34

West Roxbury Parkway:—

Land,	\$244,976 01	
Miscellaneous,	8,313 67	
	<hr/>	253,289 68

General expense, 120,870 70

\$5,845,171 64

Sinking fund requirements to 1896, . . . \$18,980 18

Care and maintenance to July 1, 1896, . . . 85,813 46

Care and maintenance July 1, 1896, to Jan.

1, 1897, 19,604 06

Sinking fund assessment for 1897, . . . 63,630 70

Sinking fund assessment for 1898, . . . 9,755 55

Sinking fund assessment for 1899, . . . 64,224 00

Interest, 28,318 61

290,326 56

Total charged to Dec. 1, 1900, \$6,135,498 20

METROPOLITAN PARKS LOAN, SERIES II.

Blue Hills Parkway:—

Land,	\$116,692 02	
Miscellaneous,	137,572 29	
	<hr/>	\$254,264 31

Middlesex Fells Parkway:—

Land,	\$193,769 20	
Miscellaneous,	431,363 70	
	<hr/>	625,132 90

Mystic Valley Parkway:—

Land,	\$155,569 20	
Miscellaneous,	191,215 27	
	<hr/>	346,784 47

Revere Beach Parkway:—

Land,	\$182,519 55	
Miscellaneous,	266,732 52	
	<hr/>	449,252 07

Neponset River Parkway:—

Land,	\$24,578 85	
Miscellaneous,	4,644 94	
	<hr/>	29,223 79

Fresh Pond Parkway:—

Land,	\$23,053 21	
Miscellaneous,	20,845 22	
	<hr/>	43,898 43

Furnace Brook Parkway:—

Land,	\$1,044 00	
Miscellaneous,	1,620 02	
	<hr/>	2,664 02

Lynnway:—

Land,	\$20,500 00	
Miscellaneous,	73 26	
	<hr/>	20,573 26

Charles River Speedway:—

Miscellaneous,	\$472,578 99	
	<hr/>	472,578 99

Blue Hills Roads:—

Miscellaneous,	\$5,714 41	
	<hr/>	5,714 41

Middlesex Fells Roads:—

Miscellaneous,	\$31,808 44	
	<hr/>	31,808 44

Stony Brook Roads:—

Miscellaneous,	\$37,183 45	
	<hr/>	37,183 45

Middlesex Fells and Lynn Woods:—

Miscellaneous,	\$4,631 52	
		\$4,631 52
General expense,		70,437 54
		<u>\$2,394,147 60</u>
Sinking fund requirements for 1896, . .	\$3,650 03	
Sinking fund assessment for 1897, . .	14,057 10	
Sinking fund assessment for 1898, . .	3,765 08	
Sinking fund assessment for 1899, . .	15,396 00	
One-half interest,	22,327 68	
		<u>59,195 89</u>
Total charged to Dec. 1, 1900,		\$2,453,343 49

NANTASKET BEACH LOAN.

Land,	\$435,688 83	
Miscellaneous,	30,386 63	
Total charged to Dec. 1, 1900,		<u>\$466,075 46</u>

The appropriations heretofore made are as follows:—

METROPOLITAN PARKS LOAN.

Original appropriation, chapter 407, Acts of 1893, . .	\$1,000,000 00	
First Revere Beach Act, chapter 483, Acts of 1894, . .	500,000 00	
Charles River Act, chapter 509, Acts of 1894,	300,000 00	
Second Revere Beach Act, chapter 305, Acts of 1895, . .	500,000 00	
General appropriation, chapter 466, Acts of 1896, . .	1,000,000 00	
General appropriation, chapter 464, Acts of 1897, . .	500,000 00	
General appropriation, chapter 530, Acts of 1898, . .	1,000,000 00	
Revere Beach Bath-house Act, chapter 142, Acts of 1899,	125,000 00	
General appropriation, chapter 396, Acts of 1899, . .	300,000 00	
Charles River Improvement Act, chapter 465, Acts of 1900,	50,000 00	
Fuller's Wharf Act, chapter 467, Acts of 1900,	30,000 00	
		<u>\$5,305,000 00</u>
To provide for interest and sinking fund requirements to		
1900, chapter 311, Acts of 1897,	900,000 00	
		<u>\$6,205,000 00</u>
Total amount of loans,		\$6,205,000 00
Amounts received from sales of buildings, receipts from		
bath-house, fines, etc.,	154,679 77	
		<u>\$6,359,679 77</u>
Total,		\$6,359,679 77
Total of amounts charged to loans,		<u>6,135,498 20</u>
		<u>\$224,181 57</u>
Balance remaining in hands of State Treasurer, . .		\$224,181 57

METROPOLITAN PARKS LOAN, SERIES II.

Original boulevard, chapter 288, Acts of 1894, . . .	\$500,000 00
General appropriation, chapter 472, Acts of 1896, . . .	500,000 00
General appropriation, chapter 521, Acts of 1897, . . .	1,000,000 00
Saugus Bridge Acts, chapter 547, Acts of 1898, . . .	100,000 00
General appropriation, chapter 428, Acts of 1899, . . .	500,000 00
Mattapan Bridge Act, chapter 443, Acts of 1900, . . .	75,000 00
Winchester Act, chapter 444, Acts of 1900, . . .	50,000 00
Revere Beach Parkway Act, chapter 445, Acts of 1900, . . .	200,000 00
	<hr/>
	\$2,925,000 00
To provide for interest and sinking fund requirements to 1900, chapter 311, Acts of 1897,	100,000 00
	<hr/>
Total amount of loans,	\$3,025,000 00
Receipts from sales, etc.,	21,717 77
	<hr/>
Total,	\$3,046,717 77
Amounts charged to loans,	2,453,343 49
	<hr/>
Balance remaining in hands of State Treasurer, . . .	\$593,374 28

NANTASKET BEACH LOAN.

Appropriation, chapter 464, Acts of 1899,	\$600,000 00
Receipts from rents, etc.,	4,975 00
	<hr/>
Total,	\$604,975 00
Amounts charged to loan,	466,075 46
	<hr/>
Balance remaining in hands of State Treasurer, . . .	\$138,899 54

Respectfully submitted,

JOHN WOODBURY,

Secretary.

DEC. 1, 1900.

LANDSCAPE ARCHITECTS' REPORT.

DEC. 12, 1900.

WILLIAM B. DE LAS CASAS, Esq., *Chairman of the Metropolitan Park Commission, 14 Beacon Street, Boston, Mass.*

DEAR SIR: — We submit herewith our report for the year ending Dec. 1, 1900.

RESERVATIONS.

In the forest reservations comparatively little work calling for our advice has been undertaken. Plans for the extension of Turtle Pond Road to the southern end of Stony Brook Reservation at Mother Brook have been prepared and put on file. In the Blue Hills plans were prepared for the location of a house and office for the Superintendent, and for grading in connection with it. In the Fells a very limited amount of work has been done in caring for parts of the forest near the roads in the north-easterly part of the reservation, and the Superintendent was advised as to the clearing and treatment of a considerable area of young, scrubby brush near the North Reservoir. The very extensive work of the Metropolitan Water Board in raising the banks of Spot Pond has been brought to substantial completion, but for certain planting and the final raising of the water. Your Commission and the public using the reservation are to be congratulated that the favorable natural conditions enabled the Water Board to carry out an engineering work of such magnitude with results so successful in respect to landscape appearance.

On the banks of the Neponset River certain modifications of the original taking lines have been called for in the course of settlement, and in these matters we have advised the Board as called upon from time to time, meeting the desires of the land owners so far as it was possible to do so without serious impairment of the ends sought in determining the takings. On Charles River, in the Riverside boating section, the broad cove lying between the headquarters and the boat-

house of Norumbega Park has been seriously clogged by the growth of pond lilies and weeds from the shallow, muddy bottom, and arrangements have been made for the dredging of the cove, the excavated material to be flatly spread upon a neighboring semi-submerged marsh under our direction. Several studies have been made for securing a convenient means of carrying canoes past the dams at Newton Lower Falls without unduly interfering with the mills, and a general study is now in progress for the betterment of the boating section of the river by various minor improvements. A simple little bath-house has been provided at Hemlock Gorge, in regard to the treatment of which we advised with the Committee in charge. We are just about to complete grading plans, in consultation with the Engineer, for the driveway along the northern bank of the river from North Beacon Street at the Watertown Arsenal to the Public Landing near Watertown Square, and in connection with these we are about to complete plans for carrying the driveway past the Galen Street bridge.

ACQUIRED PARKWAYS.

For the Mystic Valley Parkway we have prepared grading plans for the improvement of a small, open swampy area and stagnant cove north of Bacon Street, and also, acting under the orders of the Board, a revised grading plan for the playground near Winchester station, providing for a gravel surface instead of turf. The proposed mound and planting between the playground and the railroad has been omitted in consequence of this change, as the character of a large, bare surface calls for a screen between it and the parkway rather than between it and the railroad.

On the parkway from Quincy Shore to the Blue Hills, following the general line of Furnace Brook, numerous modifications of the taking lines first proposed have been called for during the course of negotiations with land owners; but, although involving numerous plans and investigations, these changes have not involved serious departure from the project as it stood a year ago.

During the construction of Fresh Pond Parkway between Mt. Auburn Street and Fresh Pond Park, Cambridge, we



FRESH POND PARKWAY—LOWELL MEMORIAL PARK.

have advised with the Engineer as to various details, especially in the Lowell Memorial Park, where a few much-needed paths have been provided.

The important bridge across the Neponset River at the beginning of the Blue Hills Parkway at Mattapan, for which an appropriation was made by the last Legislature, has been under consideration, and preliminary designs have been prepared by Mr. Edmund M. Wheelwright, in co-operation with the Engineer and ourselves. Two different methods of treating this problem present themselves: either to consider the bridge as a mere part of the formal parkway, under which openings or culverts have to be provided for the water of the river; or as an important bridge, spanning the second largest river in the district, the scenery of which has seemed of sufficient importance to justify a large expenditure for its preservation. In the first case the idea to be expressed in the design would be the continuity and importance of the parkway as an extension of Blue Hill Avenue; the flat grade of the roadway should be maintained without interruption, leaving little headroom above the water, which would be spanned by very flat arches or girders, while almost all architectural effect would be concentrated on the parapets and other features visible from the roadway. In the second case the river would be considered as one of the important features, not only in the physical configuration of the district, but in its scenery and in its park system. The bridge would express to those passing over it the fact that here, at the termination of Blue Hill Avenue, they come to one of the great river reservations, that runs for miles from west to east and is full of charming scenery; a river that is to be crossed and noted in crossing before entering on the parkway and continuing to the Blue Hills. The grade of the roadway would rise to sweep over the bridge in such a way as to mark it noticeably as a bridge over an important river, and at the same time give space for a main arch of agreeable proportions as seen from the river and the drive upon its bank. It seems to us that in view of the part which the Neponset is to play in the park system of the future the latter treatment is more appropriate and more dignified than to subordinate its continuity to that of a roadway.

At the Speedway we were called upon to advise with the Corporation of Harvard University in regard to the design of a fence to be erected on the boundary between the reservation and Soldiers' Field, the athletic ground of the College, which it skirts for a distance of 4,885 feet. The design proposed by the Harvard Corporation, a very light, high iron picket fence upon a low concrete curb, with massive concrete piers at intervals of nearly thirty feet, similar in the main to a fence already erected on another side of the field, seemed to us in this situation to be much in need of some stronger connection between the piers. Finding that the architect of the fence, Mr. H. Langford Warren, held precisely the same view, we joined him in urging that the concrete curb be raised to a base wall three feet in height. We regret to say that this joint professional advice was not accepted, to the injury of an otherwise good design.

During the spring of 1900 we furnished plans, advice and superintendence for the planting of trees on the following parkways: —

Mystic Valley Parkway (north), 11 elms and 69 Norway maples; 150 trees of other species.

Blue Hills Parkway, 431 elms.

Revere Beach Parkway (easterly portion), 118 Norway maples.

Fellsway, 27 red oaks.

Broadway Square, 27 lindens and 30 Norway maples.

Speedway, 512 elms in rows along the drives, and 344 other trees of several species scattered irregularly on the meadow.

PROPOSED PARKWAYS.

Dedham Parkway.

In pursuance of chapter 415 of the Acts of 1899, the Commission called upon us to investigate and report our suggestions upon a route for a parkway from Boyden Square, Dedham, to the Stony Brook Reservation. Basing our work upon a topographical survey prepared by the Engineering Department and upon a careful study of the ground, we drew up a preliminary plan, with profiles and typical sections. The line of the main drive, beginning on the side of Mother Brook opposite Boyden Square, followed a narrow and irregular valley, or series of valleys, of inter-

esting topography, though lacking in valuable tree growth and very rocky. In order to provide for traffic and for access to the adjacent land, at many points above the level of the main drive, two side roads were indicated at a distance from the drive varying from 30 to 210 feet. While such a parkway would provide a very direct route to the reservation from East Dedham, and would in time become interesting and attractive in itself, it would seem to us far less valuable to the district at large, considered as a park enterprise, than a route along the beautiful shores of Mother Brook itself, which flows directly from Boyden Square to the southern end of Stony Brook Reservation, — a route only a very little longer than that described above, and possessing scenery which is now, and could always be kept, far more agreeable than any attainable on the shorter line.

Woburn Parkway.

Early in the year we were instructed by the Commission to investigate and report suggestions as to a route for a parkway from Rag Rock in Woburn to the Mystic Valley Parkway. After a very careful examination of the various routes already proposed for such a parkway and of the land intervening between them, we made a report accompanied by alternative plans based upon a map compiled by the Engineering Department. The route preferred ran south from Rag Rock by way of Dow's Brook to Horn Pond, along the east shore of Horn Pond, with a taking on the west shore, down the valley to Wedge Pond in Winchester, along its eastern shore to a point just south of the church, and thence by a short deep cut across to Winchester Common, rising along its southern side to a bridge over the railroad at Winchester station, and thus joining the Mystic Valley Parkway just where it turns east to reach the Middlesex Fells. We felt obliged to express the opinion, however, that such a parkway, in spite of its agreeable character and obvious value, neither connected a reservation with a large centre of population nor formed a connecting link between two reservations, and that its creation seemed, therefore, beyond the proper sphere of Metropolitan undertakings as hitherto planned.

Cambridge and Somerville Parkway.

In pursuance of chapter 273 of the Acts of 1899, we were instructed by the Commission to investigate and report suggestions as to a route for a parkway from Fellsway at Broadway Park, Somerville, to the Charles River in the vicinity of Cottage Farm. The questions involved were so large and so complex that, although much time was given to the investigation, both on the ground and by the use of maps and other data, our studies were by no means exhaustive. It soon became clear, however, that any route passing over the extremely steep, high and long Winter Hill, in Somerville, or to the west of it, would be most inconvenient, and thus a practically fixed point in the route was determined in the narrow space between the east end of the hill and the extensive freight yards of the Boston & Maine Railroad near Washington Street, Somerville. As no other considerable hill intervenes, and as the whole region is for the most part rather closely built, so as to leave no natural scenery whatever, the determining factors in selecting a route must be directness, cost of land and buildings taken, and character of surroundings. Except as one route might be shorter than another, and aside from possible differences in bridging the railroads, the cost of construction would be about the same. As our purpose was not to prepare an estimate of actual cost but a comparison of the cost by different routes, we obtained the assessors' valuations on all the land and buildings along numerous possible routes and used these in picking our way. We finally reported in some detail upon three alternative routes between Broadway Park and Washington Street, and upon five alternative routes between that point and the Charles River. As to the width and form of the parkway, it was found that any practicable route would follow existing streets to a great extent, but would involve the destruction of all the buildings upon one side of such streets, and would so reduce the depth of most of the lots upon that side as to make the damage practically equal to the whole value of the property touched. In other words, the cost of the takings for a width of a street and one row of lots, approximately 150 feet, would in most cases be little in

excess of the cost of a much narrower taking. Moreover, the lack of any good through streets running in the direction of the proposed parkway is such, and the character of the neighborhood and the traffic through it is such, that ample provision for ordinary street traffic, independent from the pleasure drive and in connection with the adjacent property, would seem almost essential. Indeed, such provision would go far toward justifying the cost of the undertaking, if the provision of a mere pleasure drive did not seem to be worth the large expense involved. We recommended, accordingly, as the normal plan of the proposed parkway, a central pleasure drive bordered by trees in planting spaces, with one sidewalk, and on either side a single track electric car reservation and a traffic road. The least width to be considered for such a construction is 150 feet and looking to the needs of the future an even greater width would seem desirable.

The great future value of the connection set forth above is unquestionable, and delay is dangerous; but it is perhaps an open question whether in this rather closely built region values are increasing at such a rate as to outrun the loss of taxes and the payment of interest resulting from an immediate taking.

Neponset Parkway.

The gap between Paul's Bridge and the Blue Hills Reservation, referred to in the last annual report, still exists, and a third route has been planned for closing it. Of the two routes under consideration last year, one was on the line of the attractive Brush Hill Road, leading very directly toward the nearest point of the Reservation but on a very steep grade, and the other was up the valley of two brooks on easy grades and through agreeable scenery to a point on the Reservation boundary slightly further from Paul's Bridge but equally near the summit of Great Blue Hill and much nearer to Marigold Valley, Hoosicwhisick Pond and the main body of the Reservation. The latter, known as the Balster Brook route, was recommended by us, not only on account of its inherent advantages, but because it would provide for the indefinite maintenance of Brush Hill Road in its present charming condition, whereas any widening, either for parkway purposes or for the provision of electric cars, would

sadly injure, if not quite destroy, its beauty. The third route, for which we have since made plans, follows the Fowl Meadows for some distance above Paul's Bridge, and then climbs to the Blue Hills Reservation on a line south-west of Brush Hill Road. The scenery along this route is pleasing, but the length is not materially less than that by Balster Brook, while the grade is excessive. Moreover, like Brush Hill Road, it enters the Reservation at the extreme western end at a point no nearer the summit of Great Blue Hill than the entrance of the Balster Brook route, and separated from all the rest of the Reservation by half a mile of steep and indirect road, which is avoided by the latter.

As, in addition to these drawbacks, the third route contemplates delivering carriages, bicycles, pedestrians and electric cars all through a single entrance into the Reservation, tending to serious congestion, we still hold to our opinion that the route up the valley of Balster Brook is the most desirable.

During the first of the year and part of the preceding year we were directed by the Commission to assist the Board of Paris Exposition Managers in preparing an exhibit to set forth jointly the work of this Commission and that of the Metropolitan Water Board and the Metropolitan Sewer Commission. We accordingly prepared a series of maps and illustrations, which were accompanied by a collection of printed reports and a special descriptive pamphlet. An important feature of the joint exhibit was a remarkably detailed and accurate topographical model of the Metropolitan District, ten feet in diameter, and on the scale of 1:14,000, or approximately five inches to the mile. For the preparation of this model we were fortunate enough to secure the services of Mr. G. C. Curtis for the Board, and not only was the result an exceptionally good piece of modelling, showing much of the characteristic detail of the complicated topography as well as its main forms, but the distribution of the houses, factory chimneys, church spires and other works of man brought out in a very striking way the close relationship between the topographic condition and the development of the city, of which the works of the three Boards form a part.

One question of general and very critical importance, in respect to the development and future character of the reservations, has been raised during the past year by the action of the Legislature in giving the Commission the power to grant locations for street railways within the parkways and reservations.

In order to make the reservations readily, quickly and cheaply accessible to large numbers of people, — an absolute necessity if full returns are to be made to the community for its investment, — it has been obvious from the first that improved means of transit to the Blue Hills and Fells must be secured in some manner. From the first, therefore, provision has been made in the parkway plans for electric car tracks in reserved spaces, where a high speed might be safely attained and quick and convenient service established between the central part of the district and the reservations. There can hardly be any doubt that just as soon as a street railway company is willing, under proper regulations, to lay its tracks and operate a line of cars on either of these routes, so as to bring people easily and quickly to the reservation, a location should be promptly granted.

The original plan of the Middlesex Fells Parkway, prepared in our office, shows a reserved space for electric cars following the proposed border road from the end of Fellsway East to the end of Fellsway West, thus forming a double-track loop. Either such an arrangement or a small loop at the end of each line would seem very desirable for handling the large numbers of cars which will ultimately use these lines, especially on holidays. Such encroachment on the reservations may be unfortunate, but it appears to be a part of the necessary machinery for rendering the reservations available to great numbers of people, and is to be classed in the same category with broad, glaring road areas, which must be tolerated where great numbers of carriages are to be handled in a park. Authority to provide for these terminal facilities within the limits of the reservations is fortunately given by the act in addition to the right of granting locations on the parkways themselves.

But under the authority thus conferred the question at

once arises, If it is right and wise to provide for quick and cheap transportation to the borders of the reservation, would it not be still better to extend these facilities into them and across them? The reservations are large and there are in the very hearts of them most attractive and agreeable points which women and children from out the city would be only too glad to enjoy but for the tax upon their strength offered by the unwonted exercise of walking perhaps a mile from the cars.

On the other hand, the reason why people should be coming so far to get to these reservations, instead of contenting themselves with the smaller but convenient city parks that are nowhere far removed from the homes of the people, is that only in these large reservations can they really get away from the city and everything that is citified. It is not merely that they can sit on the grass and see about them only the foliage of bushes and trees and the blue sky overhead, — that could be provided for in a good-sized backyard by a skilful designer, — but also it is that they can move about freely without feeling that at any moment they may step out into the streets. It is real, honest country, near enough to the heart of the town to be reached by people who have not the money and time for railroad journeys into the bigger country off beyond.

If at any point in strolling through the woods people are liable to come upon a street railway, if, moreover, in their strolling or picnicking they are to be close within the sound of street cars, the sense of complete change from city conditions will be gone. The reservation will be deprived of that peculiar value as the poor man's country place, real country, which in the generations to come he can get in absolutely no other way. What is left is nothing more than could be secured in a number of small parks scattered over the district, each of which would be reached from the homes of the surrounding region with a fraction of the time and cost required to get to the one big area. So far then as concerns the purpose and value of the reservations themselves, we believe that trolley cars should not be permitted to come beyond the boundary zone.

Unfortunately the problem is not so simple. Although

your Commission was created solely to care for the park interests of the community, it is not justified in caring for them in disregard of all other interests; and we are not quite able to persuade ourselves that the community as a whole would be willing, even for the inestimable blessing of having real country always within reach, to pay the price that would be involved in keeping the great forest reservations as absolute barriers to city traffic. Even if the Commission, realizing the fundamental importance of excluding such reminders of the city from the reservations, should consistently refuse to admit electric cars and noisy drays, there would be a weak point in the armor. The reservations are now intersected by certain highways, the care and control of which is vested in the Commission only at the discretion of the towns by which the highways were laid out. Town officials are far more likely to realize the inconvenience to business of such barriers as would be formed by the reservations than they are to recognize the importance of preserving their rural character; and they would not hesitate to withdraw the control of the highways from the Commission, and utilize them for the most unparklike purposes, if they felt that the business prospects of their constituents would thus be bettered. Permanent provision must probably be made for some means of business transit, both for street railways and teaming, across the greater reservations; but let no one attempt to palliate the injury or justify the means on the ground that it will increase the highest usefulness of the reservations to the poor people whose only glimpse of country they are to be. It is a plain business proposition that the community cannot afford to sacrifice what is considered essential to commercial prosperity even for the sake of the greater health and happiness of the poorer citizens.

Still, there is no call to make the sacrifice needlessly complete, and, above all things, there is no call to make it unless the economic necessity is clearly apparent. If, by the expenditure of a few thousand, or a few hundred thousand dollars, convenient routes for cars and traffic can be provided around, through or under the reservation, in such manner as to interfere but slightly with its thoroughly rural character, then such routes should be provided. If the commercial

demand for the traffic is not sufficient to justify the expenditure of such sums, then by no possibility is it worth the sacrifice of the essential quality of the reservations, which would in the long run be cheaply purchased at the cost of millions.

We believe that the Commission ought to establish certain routes for all kinds of street traffic across or around the great reservations, selecting them with the utmost care both as to location and grade, in such a manner as to render them convenient, but to keep them out of sight and sound of future roads and paths, which they should cross as seldom as possible and always underneath, and to avoid so far as possible their intrusion into any peculiarly agreeable and secluded woodlands or meadows. Having established these routes, in the selection of which the officials of the adjacent towns should be consulted, the Commission ought to secure the abolishment of local rights in the present highways except in so far as they might coincide with the established permanent lines. The construction of the new traffic ways should be delayed until the demand for them would justify their cost, while in the mean time the existing highways might be used for ordinary traffic other than electric cars.

Let us repeat, in closing, that in the future for which they were purchased the forest reservations will not be valuable so much for this and that feature of beauty to which people may wish to be carried, as for the presence, in an accessible region, of a body of land large enough and free enough from all urban suggestion to give a complete change and rest to those who cannot go away to the country.

Respectfully submitted,

OLMSTED BROTHERS.

ENGINEER'S REPORT.

BOSTON, Dec. 12, 1900.

HON. W. B. DE LAS CASAS,

Chairman, Metropolitan Park Commission.

SIR:—The following is the sixth annual report of the Engineering Department, enumerating the operations of the year ending Oct. 31, 1900.

No material change has been made in the duties of the department. All work has been done generally under written orders of the Secretary of the Commission. The organization has remained the same, as previously reported, except that a reduction in construction work and surveying has been followed by a reduction in the number of men employed. The force at the beginning of the year was 59, and at the end 33; average for the entire year 46.

The cost of engineering and surveying is summarized in Table 3, appended. Construction and maintenance work done under supervision of this department has amounted to \$311,983.06, or 25 per cent. less than that of the previous year.

An appraisal of the property in charge of the department, omitting the value of maps, plans, notes and records, is as follows:—

Equipment:—	
Offices,	\$2,108 94
Surveying and drawing instruments,	3,241 61
Miscellaneous,	82 95
	<hr/>
	\$5,433 50
Supplies:—	
General,	1,391 45
	<hr/>
Total,	\$6,824 95

Details are given under the following items of parkways and reservations, and in the tables added at the end.

PARKWAYS.

Blue Hills Parkway. — The construction of the portion from Brook Road to Canton Avenue, and extension as a boundary road to Harland Street, by Bell & Co., under contract No. 36, was completed May 8, 1900. The final estimate of their work was \$81,238.51.

Canton Avenue, westerly from the circle to the boundary road above referred to, including the Pine Tree Brook culvert, has been rebuilt, under a contract with D. F. O'Connell. This work was done between May 14, 1900, and July 10, 1900, and cost \$4,375.74.

The west roadway, from Neponset River to Brook Road, is subject to very heavy traffic, and after two years showed a wear of two to four inches; this was resurfaced in June with broken stone, at a cost of \$1,759.30.

The total cost of construction and maintenance under this department's direction has been as follows: —

Previously reported: —			
Construction,	\$83,436	84	
Engineering and inspection,	4,225	36	
			\$87,662 20
Year ending Oct. 31, 1900: —			
Construction,	\$27,103	65	
Engineering and inspection,	1,959	05	
			29,062 70
Total,			\$116,724 90

There are now completed 1.47 miles of parkway with a double drive and .26 of a mile of single road in Canton Avenue and boundary road to Harland Street. The straight, formal portion of the parkway is completed, except the short length from Mattapan Square across the Neponset River. From Canton Avenue to the Harland Street entrance of the Blue Hills Reservation, a distance of three-quarters of a mile, the lay-out proposed will be more of an informal and park-like character, with roads along the boundaries and a drive following up the valley of the Pine Tree Brook. The Harland Street entrance is .76 of a mile long, and the total distance from Neponset River to the reservation proper at Crossman's Pines is 3 miles.

Plans for a new bridge across the Neponset River, at the entrance to the parkway from Mattapan Square, are being prepared.

Sixty-four stone bounds and one iron bolt have been set on the boundaries.

Dedham Parkway. — A topographical survey, of 77 acres area, has been made for studies of a suggested parkway from the Stony Brook Reservation to Boyden Square in Dedham, a distance of 1.13 miles.

Fresh Pond Parkway. — Proposals for the construction of this parkway in Cambridge, from Mt. Auburn Street to Huron Avenue, were received June 25, 1900, from the following : —

David Hall, Boston,	\$24,837 00
Patrick McGovern, Boston,	22,959 40
Mirick & Wentworth, Malden,	22,862 70
S. J. Cowin & Co., Boston,	22,750 00
H. P. Nawn, Boston,	20,862 80
Jeremiah Sullivan, Cambridge,	19,536 40
Thomas H. Gill, Somerville,	18,301 80
John H. McCusker, Waltham,	17,396 50
T. Stuart & Son, Newton,	17,346 40
Wm. J. McCarthy, Somerville,	16,714 70
A. J. Wellington, Boston,	16,676 00

The contract, No. 47, was awarded to A. J. Wellington. Work began July 5, 1900, and was completed Oct. 30, 1900. The final estimate under this contract was \$16,985.50.

Paths have been built in Lowell Memorial Park, through which this drive passes, also portions of the surface regraded and new fences built.

The total cost of construction to Nov. 1, 1900, has been as follows : —

Construction,	\$17,794 59
Engineering and inspection,	1,353 67
Total,	<hr/> \$19,148 26

The parkway is 70 feet in width and .54 of a mile in length, connects at one end with the entrance to Gerry's Landing in the Charles River Reservation and at the other with the entrance to Fresh Pond Park.

The cross streets of the city are so well lighted that only 13 new lamps of the Welsbach system have been added, or an average of 1 for each 1,060 square yards of roadway surface. Forty-one stone bounds have been set, defining the boundaries.

Furnace Brook Parkway (Merrymount Park to Blue Hills Reservation, Quincy). — Additional topographical surveys over an area of 93 acres have been made for the preliminary studies of this parkway. Taking plans have been prepared from Newport Avenue to the Blue Hills Reservation, a distance of two and one-third miles. Construction plans are in preparation, with especial reference to establishing grades of proposed roadways.

Middlesex Fells Parkway. — In the evening of Nov. 14, 1899, there was a break in the Metropolitan water main located in Fellsway East, between Highland Avenue and the Reservation, gullying the east roadway. This damage was repaired under direction of this department, at the expense of the Metropolitan Water Board.

An enlargement of the culvert across the parkway, at the junction of Fellsway East and West, will be necessary when the city of Malden carries out its proposed plans for the improvement of the brook from culvert to Malden River. At the time of construction it was expected that some of the drainage to this culvert would be diverted to another channel, but such an arrangement has since proved impracticable.

The boundaries of the extension of Fellsway in Somerville to Broadway have been defined by 16 stone bounds.

Mystic Valley Parkway. — Short extensions have been made to the drainage system at the entrance to the Fells Reservation and near the corner of Bacon Street and entrance to the Wedgemere station.

A topographical survey has been made of an area of 28 acres, from Bacon Street to Walnut Street in Winchester.

The grading of Manchester Field, between Mystic Avenue and Walnut Street in Winchester, area $8\frac{1}{2}$ acres, was begun Oct. 18, 1900, by day work; labor and tools being furnished by Charles G. Craib, under contract No. 52.

Nahant Beach Parkway. — Taking plans for 68.99 acres, from the Lynn boundary to Spring Road, have been prepared.

Neponset River Parkway.—The boundaries of the takings have been defined by 36 stone bounds.

A topographical survey of an area of 110 acres has been made for preliminary studies between Paul's Bridge and the Blue Hills Reservation. Plans for proposed takings of 37.51 acres have been prepared.

Revere Beach Parkway.—The completed portion from Charles Eliot Circle to Winthrop Avenue is .35 of a mile long. From this section to Campbell Avenue there is .26 of a mile filled to sub-grade. No construction work has been done on the section between Campbell Avenue and Mill Street. This length, by the present taking, is .73 of a mile, or by an alternative route, passing the Revere railroad station, .83 of a mile. The portion from Mill Street in Revere, across Chelsea, to Main Street in Everett, is 2.73 miles long, and has been built to sub-grade.

Proposals were received, Nov. 6, 1899, for filling to sub-grade the section from Mill Street to Main Street, from the following:—

Albert H. Eichorn, Boston,	\$294,405 00
Ward & Conlin, East Boston,	255,645 00
Nawn & Brock, Boston,	245,615 00
H. W. Varnum, Caribou, Maine,	201,917 00
F. W. McCusker, Waltham,	183,445 00
Coleman Brothers, Charlestown,	178,957 50
Massachusetts Grading Company, Boston,	156,310 00

This contract, No. 42, was awarded to the Massachusetts Grading Company, but they being declared in default, through failure to furnish the required bond, it was afterwards given to Coleman Brothers. Work began Nov. 29, 1899, and was completed Oct. 25, 1900, one week ahead of contract time. The final estimate under this contract was \$122,165.44; the difference between this amount and that of proposal being accounted for by drainage work omitted and an excessive allowance estimated for settlement of filling on marsh land.

County Road, in Chelsea and Everett, was lowered to conform to the grade of the parkway. This, with the approaches, a total length of 700 feet, has been graded and surfaced at an expense of \$1,492.20, exclusive of engineering.

At Sales Creek the old wooden culvert was removed in

March, and filling material placed about and over the new culvert at a cost of \$1,493.60.

In connection with work being done by the town of Revere, the entrance of Dolphin and Atlantic avenues to the parkway, near Eliot Circle, was brought up to grade and surfaced by Mirick & Wentworth at a cost of \$1,256.54.

The frost and spring rains caused a slide, on the north slope of the parkway, just west of the Beachmont Bridge. This was repaired in May by stepping and underdraining. The roadway surface was at the same time repaired. The work was done by Patrick McGovern, and the total cost was \$506.40.

The total cost of construction and maintenance on the whole parkway, according to vouchers of this department, has been as follows:—

Previously reported:—			
Construction,	\$111,978	67	
Engineering and inspection,	6,687	43	
			\$118,666 10
Year ending Oct. 31, 1900:—			
Construction,	\$127,589	84	
Engineering and inspection,	5,780	10	
			133,369 94
Total,	\$252,036	04	

Twenty-nine stone bounds have been set, partially defining the boundaries.

Topographical surveys for use in grade damage settlements and construction plans have been made, covering an area of 55 acres.

Spy Pond Parkway.—Preliminary estimates of construction on various routes between Mystic River Reservation and Fresh Pond have been made in continuation of studies previously reported.

RESERVATIONS.

Blue Hills.—Topographical surveys have been made over an area of 27 acres, and the reconstructed Saw Cut Notch road, 2.63 miles in length, has been located. The principal angles in the boundary of the Henry L. Pierce devise have been defined by permanent points. Fifty-nine stone bounds, 6 cedar posts and 9 iron bolts have been set. A topographical survey of the 700 acres of the H. L. Pierce devise remains to be made to make the general map of the reservation complete.



CHARLES RIVER RESERVATION — THE SPEEDWAY.

Charles River. — A gravel walk, 1,235 feet long and 10 feet wide, connecting with the shore work being done by the city of Cambridge, has been constructed from Mt. Auburn Street to the river at Gerry's Landing. Incidental to this work, some filling and sloping of the shore with gravel was necessary. Gravel for the walk and shore was obtained from the river bed, the Eastern Dredging Company furnishing 2,050 cubic yards for \$820. Proposals for the construction were received May 31, 1900, from the following: —

P. McGovern,	\$1,390 00
D. F. O'Connell,	1,225 00
T. Stuart & Son,	630 00

The contract, No. 49, was awarded to T. Stuart & Son. Work began June 5 and was completed June 28; final estimate, \$766.29.

Total cost of construction,	\$1,586 29
Engineering and inspection,	104 33
Total,	<hr/> \$1,690 62

At Riverside the south shore of the river, from the Boston & Albany Railroad bridge to Riverside Road, has been cleared of old buildings and foot bridge over the river, and the land graded. Material was furnished from excavations for Gray and Frost's new boat house and dock and from dredging the river. Completed July 10, 1900, and cost \$246 78.

The gates in the Hickey mill dam, at Newton Upper Falls, were rebuilt, July 27 to Aug. 3, 1900, at a cost of \$68.

A sewer has been built by the city of Newton in the reservation from Washington Street, Newton Lower Falls, to Boylston Street, Newton Upper Falls. In connection with this work, and with the city's assistance, a narrow roadway, of simple construction, is being built along the boundary, under contract No. 51 with Walter Chesley. This road work began Oct. 18, 1900, and when completed will be 1.78 miles long.

Charles River, Speedway Section. — The shore construction, under contract No. 29, was completed by Nawn & Brock Dec. 23, 1899. The final estimate amounted to \$76,217.12, or \$7.94 per lineal foot. The work included

79,380 cubic yards of excavation and the furnishing of 50,251 cubic yards of gravel for surfacing of the slopes. The finished shore has a slope generally of 1 in 7. Where steeper than 1 in 5 it has been roughly paved.

It was decided, after the experience of the season of 1899, to provide an exit from the Speedway near the centre, allowing of its use, by those who desired, as a half-mile course. This work involved widening the track on the marsh side for a distance of 1,600 feet, to secure an additional width of 15 feet at exit, the changing of fences and drains, and the building of 600 lineal feet of retaining wall. The labor and tools for this work were furnished under contract No. 46, with Nawn & Brock. Included in the work of making the exit, and forming the larger portion of the total, was the bringing up of the settled portions of Speedway, drive, walks and lawn strips, and resurfacing; the work also included marsh grading and work incidental to tree planting, and the furnishing of 7,137 cubic yards of cinders, 9,296 cubic yards of loam and 2,032 tons of broken stone. Work began March 26, 1900, and was completed July 17, 1900.

The total cost of construction and maintenance, according to vouchers of this department, has been as follows:—

Previously reported:—			
Construction,	\$388,046	75	
Engineering and inspection,	11,294	27	
			\$399,341 02
Year ending Oct. 31, 1900:—			
Construction,	\$49,483	98	
Engineering and inspection,	1,960	71	
			51,444 69
Total,			\$450,785 71

The half-mile course was opened April 26, 1900, and the entire course June 8, 1900. The surface of Speedway was originally finished with rich black loam; this surfacing has been retained, except with the addition of a thin layer of clean, fine gravel, which was worked and rolled into the loam surface. The result has been a surface that has given universal satisfaction, and can be used within a few hours after a heavy rainfall. While there will undoubtedly occur

further settlements, it is expected that they will not be as noticeable as those repaired last spring.

The boundary is marked with stone bounds, except the length defined by the faces of masonry fence posts along land of Harvard College. This fence, erected this year, has been built of concrete masonry and steel and is 4,900 feet long. The new Harvard College boat house on land leased to the college has also been completed.

A total of 88 stone bounds and 4 iron bolts have been set on the Charles River takings. Taking plans for 31.80 acres have been prepared.

Hart's Hill. — A taking plan of 23.09 acres from the Harriet N. Flint estate in Wakefield has been made.

Hemlock Gorge. — Construction plans have been prepared for .23 of a mile of boundary road, extending in a northerly direction from Central Avenue in Needham.

King's Beach. — The growth of turf and grass at the northerly end of the beach caused an unsanitary condition, and has been removed. The reservation has also had a general clearing of rubbish and a portion of the retaining wall rebuilt. Two bids were received for this work, and it was done by the lower, M. McDonough, for \$400. The boundary has been defined by 5 stone bounds and 4 drill holes.

Lynn Shore. — Taking plans have been prepared for 6.92 acres, giving a shore length of .41 of a mile from the Swampscott town line, at the King's Beach Reservation, to King's Beach Terrace. Fifteen stone bounds have been set on the boundary.

Middlesex Fells. — A much-needed improvement for the safety of the frequenters of this reservation was the widening from 13 feet to 30 feet of the dam and causeway between the Middle and South Reservoirs of the Winchester Water Works. Several local contractors were invited to bid, but only two proposals were received, and the work was awarded to the lower, Michael Nelson of Winchester. In connection with this work, and to obtain the necessary material, the reservation road leading to it from the direction of Winchester was widened and the grades improved. This work, to subgrade, was begun March 21, 1900, and completed June 20, 1900. Total cost under this contract, No. 44, was \$1,994.08. The surfacing and fencing was done by the Superintendent

of the Reservation. The small wooden bridge over the outlet of the Winchester South Reservoir, while comparatively new, was found on examination to be of insufficient strength. Rebuilt May 15 to May 28, 1900, at a cost of \$215.22.

Proposals for building a 20-foot gravel roadway, on the easterly boundary of the Whitmore Brook entrance, were received Sept. 17, 1900, from 12 contractors, the aggregate ranging from \$19,670 to \$6,957. The contract, No. 50, was awarded to the lowest, but was abandoned, and the check accompanying the bid was declared forfeited to the Commonwealth. The work was readvertised, and proposals were received Oct. 8, 1900, from the following:—

Richard Falvey, Somerville,	\$11,230 50
Patrick McGovern, Boston,	10,824 40
Coleman Brothers, Everett,	10,097 50
Charles G. Craib, Winthrop,	10,057 00
John H. McCusker, Waltham,	9,981 50
Mirick & Wentworth, Malden,	9,689 50
Auguste Saucier, Framingham,	9,088 00
Thomas H. Gill, Somerville,	9,041 90
Leahy & Meskill, Everett,	8,302 40

The contract, No. 50-A, was awarded to Leahy & Meskill. Work began Oct. 22, 1900, and is now in progress. Length, .81 of a mile, and extends from Winthrop Street in Medford to the reservation near west dam of South Reservoir.

In August the boundary road from Whitmore Brook entrance to Mystic Valley Parkway (formerly Mt. Vernon Street entrance), Winchester, was staked out for a 20-foot gravel roadway, and has since been built under direction of the superintendent of the reservation; length, 1.64 miles.

The boundaries of the Whitmore Brook entrance have been marked by 37 stone bounds and 1 drill hole.

Mystic River.—Additional taking plans have been prepared for an area of 23.64 acres, and taking lines have been defined by setting 147 stone bounds and 4 cedar posts.

Nantasket Beach.—Taking plans have been prepared for 21.27 acres, and the boundaries of takings defined by 35 stone bounds and 5 drill holes.

Neponset River.—The condition of two of the foot bridges in Hyde Park have been examined and made subject of reports. The area covered by taking plans has been



WINTHROP SHORE RESERVATION — SEA WALL.

221.16 acres. Two hundred and seventeen stone bounds and 11 cedar posts have been set on boundaries.

Quincy Shore. — Taking plans over an area of 38 acres, from corner of Hancock Street and Atlantic Avenue to the shore, and along the shore to Merrymount Park, have been made, and the boundaries of lands taken defined by 129 stone bounds, 6 cedar posts and 1 drill hole.

Revere Beach. — Sand catchers have been constructed on sewer and connections from the bath-house, at a cost of \$191.02. Additional taking plans for 4.27 acres have been prepared.

Stony Brook. — The surveying has been done for a study, by the Landscape Architects, of an extension of Turtle Pond Road through Happy Valley to River Street. An additional taking plan has been made for 1.64 acres, and 9 stone bounds have been set. Grades were given for Bold Knob Road, under the directions of the superintendent, by whom it has been built. The location of this reservation road has been obtained for the topographical map.

Winthrop Shore. — The Winthrop shore sea wall, begun July 27, 1899, was completed Jan. 30, 1900, by Ross & Fowler, under contract No. 40. The wall is 1.05 miles in length, and contains 10,600 cubic yards of masonry below the stone coping and bastion steps. The abutments for the bridge over the Boston, Revere Beach & Lynn Railroad, at the northerly end, were built of the same quality of masonry, by the same contractors, and were completed March 21, 1900. The total amount of the final estimate for sea wall and abutments was \$95,170.74.

Proposals were received for the iron bridge, noted above, Nov. 8, 1899, from the following:—

New England Structural Company, . . .	\$5,340 00
Pittsburg Bridge Company, . . .	5,050 00
The R. F. Hawkins Iron Works, . . .	4,637 00
Boston Bridge Works, . . .	4,492 00
The King Bridge Company, . . .	4,375 00

The contract was awarded to the Boston Bridge Works, and was completed March 23, 1900, at a cost of \$4,887. The addition to price bid being allowed, by previous arrangement, for completion nearly eight weeks before contract time, which was May 16, 1900. Public accommoda-

tions, across the railroad at this point, between two sections of the town, made this early completion advisable.

Under contract No. 43, the iron fence on sea wall was erected by Richardson & Clement, the final estimate amounting to \$7,078.35. This fence, 5,515 feet long, was finished June 30, 1900.

Proposals for surfacing, drainage and other incidental work were received March 12, 1900, from the following:—

Bell & Co., Roxbury,	\$48,996 50
Coleman Brothers, Charlestown,	41,006 50
Bruno & Salomone, East Boston,	40,112 70
Ross & Fowler, Boston,	38,724 00
Mirick & Wentworth, Malden,	38,325 50
Thomas H. Gill, Somerville,	37,818 00
Jones & Meehan, Boston,	36,924 00
H. Gore & Co., Boston,	36,645 00
P. Brennon & Co., Charlestown,	36,400 50
T. Stuart & Son, Newton,	36,037 00
A. J. Wellington, Boston,	34,540 00
Patrick McGovern, Boston,	34,538 20

The contract, No. 45, was awarded to Patrick McGovern. The work began March 26, 1900, and was completed June 19, 1900. The final estimate was \$36,820.54.

Proposals for wooden steps and fencing were received May 28, 1900, from 4 parties, and awards made to the lowest, Joseph Ross for the steps, \$332.64, and Wm. H. Graham for the wooden fence, \$125.50.

A small amount of additional work was done on drainage system by Coleman Brothers, Sept. 28 to Oct. 17, 1900, at a cost of \$256.83, with very satisfactory results.

The total cost of construction and maintenance under direction of this department has been as follows:—

Previously reported:—		
Construction,	\$45,036 16	
Engineering and inspection,	1,607 30	
	<hr/>	\$46,643 46
Year ending Oct. 31, 1900:—		
Construction,	\$101,141 53	
Engineering and inspection,	4,268 65	
	<hr/>	105,410 18
Total,		<hr/> \$152,053 64

The ultimate boundary line has been marked by 29 stone bounds and 6 drill holes.

GENERAL.

Incidental to taking and general land plans, many special plans have been made for use in settlement of claims. The areas, for which taking and other plans have been made and noted in this report, are given irrespective of action taken thereon by the Commission. The total area represented by taking plans and plans of conveyance to the park system for the year is 536.41 acres; by restriction plans, 9.72 acres; by abandonment plans, 41.99 acres. Topographical surveys have been made of about 400 acres. Engineering and inspection, incidental to actual construction and maintenance, omitting travelling and other incidental expenses, has averaged 5.53 per cent.

The following table gives data of lengths of parkways: —

	Completed (Miles).	Under Con- struction (Miles).	Remainder (Miles).	Totals (Miles).
Blue Hills: Neponset River to Harland Street entrance, Mil- ton,	1.47	—	.78	2.25
Fresh Pond: Mt Auburn Street to Huron Avenue, Cambridge, . .	.54	—	—	.54
Furnace Brook: Adams Street to Blue Hills Reservation, Quincy,	—	—	1.55	1.55
Lynnway: Revere Beach Reser- vation to northerly side of Sau- gus River, Revere and Lynn, . .	—	—	.69	.69
Middlesex Fells: Broadway to Middlesex Fells Reservation, Somerville, Medford and Mal- den,	4.32	—	.28	4.60
Mystic Valley: High Street to Middlesex Fells Reservation, Medford and Winchester, . . .	2.89	—	—	2.89
Nahant Beach: Lynn line at Washington Street to Spring Road, Nahant,	—	—	2.23	2.23
Neponset River: junction Revere Street and Damon Street to junction Brush Hill Road and Milton Street, Hyde Park and Milton,	—	—	1.12	1.12
Revere Beach: Revere Beach Res- ervation to Middlesex Fells Parkway, Revere, Chelsea, Everett and Medford, . . . .	.35	2.99	1.79	5.13
Totals,	9.57	2.99	8.44	21.00

The lengths of shore frontage of the several beach takings are as follows :—

	Miles.
King's Beach, . . . . .	.28
Lynn Shore, . . . . .	.41
Nahant Beach,	3.90
Nantasket Beach,	1.02
Quincy Shore,	2.03
Revere Beach,	2.71
Winthrop Shore,	1.32
Total,	11.67

Distances on the three principal rivers of the district along which takings have been made :—

	Miles.
Charles River,	14.87
Mystic and Aberjona rivers,	7.50
Neponset River,	9.37
Total,	31.74

The shores of Charles River have had restrictions placed thereon for a distance of 1.11 miles.

The following tables are appended to his report :—

- Table 1. Summary of plan work.
- Table 2. Summary of vouchers.
- Table 3. Summary of cost of engineering.
- Table 4. Prices paid items of construction.

Respectfully submitted,

WM. T. PIERCE,

Engineer.

TABLE 1. — *Summary of Maps and Plans prepared during Year ending Oct. 31, 1900, omitting Blue and Other Prints.*

	Abandonments and Conveyances.	Construction.	Copies.	Entrances.	General.	Land and Settle- ment.	Restriction.	Takings, including Conveyances to Commonwealth.	Topographical.*	Working Plans (Office),	Totals.
<i>Parkways.</i>											
Blue Hills,	-	10	3	-	-	-	-	-	-	1	14
Dedham,	-	-	-	-	-	-	-	-	1	3	4
Fresh Pond,	6	11	-	-	-	1	-	1	-	3	22
Furnace Brook,	1	2	23	-	-	9	-	4	-	5	44
Lynn Fells,	-	-	2	-	-	3	-	-	-	1	6
Lynnway,	-	1	-	-	-	-	-	-	-	-	1
Middlesex Fells,	2	52	9	1	-	6	3	-	1	3	77
Mystic Valley,	1	9	19	1	-	5	-	-	1	3	39
Nahant Beach,	-	-	1	-	1	-	-	2	-	1	5
Neponset River,	-	-	-	-	-	4	-	2	1	4	11
Revere Beach,	9	74	-	-	2	18	-	6	2	8	119
Speedway, (Charles River Reservation),	-	9	1	-	-	2	-	1	-	1	14
Spy Pond,	-	3	-	-	-	-	-	2	-	-	5
Totals,	19	171	58	2	3	48	3	18	6	33	361
<i>Reservations.</i>											
Beaver Brook,	-	-	4	-	-	-	-	-	-	1	5
Blue Hills,	1	-	1	-	-	1	-	-	3	5	11
Charles River,	12	29	8	-	1	43	1	9	1	8	112
Hart's Hill,	-	-	-	-	-	-	-	1	-	-	1
Hemlock Gorge,	-	3	4	-	-	-	-	-	-	-	7
King's Beach,	-	-	-	-	-	-	-	-	-	1	1
Lynn Shore,	3	1	4	-	-	3	-	1	-	3	15
Middlesex Fells,	1	14	6	-	-	1	-	1	8	2	33
Mystic River,	1	-	8	-	1	17	-	2	-	3	32
Nantasket Beach,	1	2	4	-	2	6	-	3	-	8	26
Neponset River,	3	4	23	-	-	23	2	5	1	4	65
Quincy Shore,	-	-	6	-	-	10	-	4	-	1	21
Revere Beach,	2	9	5	-	-	3	-	3	-	2	24
Stony Brook,	1	9	7	-	-	1	-	1	-	1	20
Winthrop Shore,	5	40	4	-	1	2	-	1	-	3	56
Totals,	30	111	84	-	5	110	3	31	13	42	429
Grand totals,	49	282	142	2	8	158	6	49	19	75	790

TABLE 2. — Summary of Vouchers of the Engineering Department, including, under Construction and Maintenance, the Entire Estimated Value of Work performed during Year ending Oct. 31, 1900.

INCIDENTAL TO ENGINEERING DEPARTMENT.													
	Construction and Maintenance.	Boundaries, Monuments, etc.	Totals.	EQUIPMENT.		OPERATING EXPENSES.						Totals.	Grand Totals.
				Offices.	Surveying and Drawing Instruments.	Engineering and Surveying.	Offices.	Repairs.	Supplies.	Travel.	Incidental Expenses.		
General equipment, . . .	-	-	-	\$241 27	\$176 95	-	\$158 01	-	-	-	-	\$418 22	\$418 22
General operating expenses, . . .	-	-	-	-	-	\$720 00	-	\$137 43	\$575 76	-	-	1,591 20	1,591 20
Parkways.													
Blue Hills, . . .	\$27,103 65	\$165 64	\$27,269 29	-	-	2,452 99	25	-	7 75	\$142 50	\$11 18	2,614 67	29,883 96
Dedham, . . .	-	-	-	-	-	306 90	-	-	-	10 00	2 20	319 10	319 10
Fresh Pond, . . .	17,794 59	89 55	17,884 14	-	-	1,867 42	-	-	26 50	-	42 95	1,936 87	19,821 01
Furnace Brook, . . .	-	-	-	-	-	2,379 23	-	-	-	71 50	12 49	2,463 22	2,463 22
Lynn Fells, . . .	-	-	-	-	-	144 65	-	-	-	40 00	55	185 20	185 20
Lynnway, . . .	-	-	-	-	-	39 76	-	-	-	-	05	39 81	39 81
Middlesex Fells, . . .	920 54	41 80	962 34	-	-	850 43	-	-	-	-	11 25	861 68	1,824 02
Mystic Valley, . . .	661 01	165 50	826 51	-	-	824 88	9 98	-	5 75	55 45	9 91	905 97	1,732 48
Nahant Beach, . . .	-	34 20	34 20	-	-	345 37	-	-	-	5 00	9 60	359 97	394 17
Neponset River, . . .	-	81 70	81 70	-	-	473 56	-	-	2 15	22 50	2 35	500 56	582 26
Revere Beach, . . .	127,589 84	67 05	127,656 89	-	-	7,759 82	16 45	-	94 55	83 40	215 08	8,169 30	135,826 19
Speedway (Charles River Reservation), . . .	49,483 98	51 30	49,535 28	-	-	2,172 46	6 40	-	35 23	90 13	51 15	2,355 37	51,890 65
Spy Pond, . . .	-	-	-	-	-	100 30	-	-	-	24 00	1 00	125 30	125 30
Parkway totals, . . .	\$223,553 61	\$696 74	\$224,250 35	-	-	\$19,717 77	\$33 08	-	\$171 93	\$544 48	\$369 76	\$20,837 02	\$245,087 37

[illegible]

TABLE 3. — *Summary of Engineering and Surveying.*

	Abandonments, Conveyances, etc.	Boundaries, Plans, Stake- ings and Mon- uments.	Construction and Maintenance Inclu- ding Rental to Act- ual.	Construction, Preliminary to.	General.	Land and Settle- ments, Surveys and Plans.	Restrictions, Sur- veys and Plans.	Takings.	Topographical.	Totals.
<i>Parkways.</i>										
Blue Hills,	-	\$106 83	\$1,959 05	\$342 63	\$9 20	\$6 40	\$26 38	-	\$2 50	\$2,452 99
Dedham,	-	-	-	1 20	-	-	-	-	305 70	306 90
Fresh Pond,	\$78 60	53 95	1,353 67	319 07	-	18 80	-	\$13 80	29 63	1,867 42
Furnace Brook,	6 70	153 24	-	20 30	-	241 89	-	1,724 55	232 55	2,379 23
Lynn Falls,	-	-	-	-	-	9 10	-	135 55	-	144 65
Lynnway,	-	20 21	-	19 55	-	-	-	-	-	39 76
Middlesex Falls,	20 50	11 22	410 95	28 83	68 47	50 15	257 11	3 20	-	850 43
Mystic Valley,	11 70	36 23	261 11	312 34	85 20	103 10	6 10	9 10	-	824 88
Nahant Beach,	-	4 30	-	-	-	-	-	339 27	1 80	345 37
Neponset River,	-	70 43	-	35 08	-	31 43	-	26 25	310 37	473 56
Revere Beach,	187 63	201 05	5,780 10	809 82	38 08	467 03	31 23	118 28	126 70	7,759 82
Speedway (Charles River Reservation),	-	23 45	1,960 71	178 80	-	9 50	-	-	-	2,172 46
Spy Pond,	-	-	-	56 73	-	13 90	-	29 67	-	100 30
Parkway totals,	\$304 93	\$680 91	\$11,725 59	\$2,124 35	\$200 95	\$951 30	\$320 82	\$2,399 67	\$1,009 25	\$19,717 77

Reservations.

Beaver Brook,	-	-	-	-	\$8 40	-	-	\$19 20	-	\$27 60
Blue Hills,	\$7 40	\$379 87	\$33 10	\$62 72	49 35	\$93 18	-	19 20	\$261 96	906 78
Charles River,	223 71	389 27	439 05	598 84	72 27	1,032 42	\$25 22	327 79	29 55	3,138 12
Hart's Hill,	-	-	-	-	-	-	-	16 60	-	16 60
Hemlock Gorge,	-	1 10	5 50	35 43	-	3 80	-	80	-	46 63
Kling's Beach,	-	37 05	23 00	5 00	-	11 70	-	-	-	76 75
Lynn Shore,	37 25	46 32	-	-	6 00	20 40	5 60	216 52	-	332 09
Middlesex Fells,	25 15	117 80	511 15	452 85	14 75	64 85	-	15 80	197 10	1,399 45
Myatie River,	19 45	253 48	-	5 00	38 50	384 54	-	313 23	3 43	1,017 63
Nahant Beach,	-	-	-	-	-	-	-	249 82	-	249 82
Nantasket Beach,	19 20	70 25	20 30	125 32	17 52	189 52	-	486 72	32 63	961 46
Neponset River,	98 11	1,065 74	41 30	74 10	15 70	749 48	115 87	529 31	-	2,689 61
Quincy Shore,	-	398 50	-	-	3 00	255 70	-	811 88	-	1,469 08
Revere Beach,	8 80	67 48	162 78	124 12	34 40	130 55	-	97 83	-	625 96
Stony Brook,	26 37	46 75	23 50	79 10	74 60	36 90	-	124 42	60 90	472 54
Winthrop Shore,	154 18	62 20	4,268 65	557 54	52 60	67 51	-	-	87 00	5,249 68
Reservation totals,	\$619 62	\$2,935 81	\$5,528 33	\$2,120 02	\$387 09	\$3,040 55	\$146 69	\$3,229 12	\$672 57	\$18,679 80
Miscellaneous,	-	-	-	-	720 00	-	-	-	-	720 00
Grand totals,	\$924 55	\$3,616 72	\$17,253 92	\$4,244 37	\$1,308 04	\$3,991 85	\$467 51	\$5,628 79	\$1,681 82	\$30,117 57

TABLE 4.—Prices paid for Principal Items of Construction.

CONTRACT No.,	PARKWAYS.			RESERVATIONS.						
	BLUE HILLS.	REVERE BEACH.	FRESH POND.	WINTHROP SHORE.			CHARLES RIVER.		MIDDLESEX FIELDS.	
				40.	43.	45.	29.	49.		
	36.	Special.	42.						47.	
<i>Drains.</i>										
8-inch vitrified pipe (lineal foot),	\$0 22	\$0 30	-	-	\$0 68	-	-	-	-	-
10-inch vitrified pipe (lineal foot),	30	40	\$0 35	-	76	-	-	-	-	-
12-inch vitrified pipe (lineal foot),	40	-	40	-	-	-	-	-	-	\$0 40
15-inch vitrified pipe (lineal foot),	50	-	1 00	-	-	-	-	-	-	52
18-inch vitrified pipe (lineal foot),	65	-	1 50	-	-	-	-	-	-	-
20-inch vitrified pipe (lineal foot),	-	-	-	-	-	-	-	-	-	82
24-inch vitrified pipe (lineal foot),	-	-	-	-	-	-	-	-	-	1 99
10-inch cast-iron pipe (lineal foot),	-	-	-	-	\$1 25	-	-	-	-	-
12-inch cast-iron pipe (lineal foot),	-	-	-	-	1 65	-	-	-	-	-
<i>Edgestones.</i>										
Furnishing and setting (lineal foot),	2 00	1 10	-	-	-	-	-	-	-	-
Recutting and resetting old (lineal foot),	-	-	-	-	-	-	-	-	-	-
<i>Fences.</i>										
Iron pipe, three rail (lineal foot),	-	-	-	-	-	-	-	-	-	-
Iron pipe, two rail (lineal foot),	-	-	-	-	\$1 27	-	-	-	-	-
					1 00	-	-	-	-	-

Grading.

Earth excavation (cubic yard),	21	50	25	24	25	15	37	\$0 54	\$0 20	\$0 35	30
Earth filling (cubic yard),	38	50	50	-	50	1 15	01	50	-	-	-
Rock excavation (cubic yard),	1 00	-	90	-	-	-	-	-	-	1 35	-

Gutters.

Vitrified brick paved (square yard),	-	-	-	-	-	-	1 97	-	-	-	-
Cobble stone paved (square yard),	-	-	-	-	-	-	-	-	-	-	70

Masonry.

Brick (cubic yard),	11 50	-	-	12 00	-	-	14 50	-	-	-	-
Bridge seat and parapet, (cubic yard),	-	-	-	-	-	25 30	-	-	-	-	-
Riprap (square yard),	-	-	-	-	-	-	-	1 50	-	-	-
Rubble, dry (cubic yard),	4 00	-	-	-	-	-	-	-	-	-	4 25
Rubble, pointed (cubic yard),	-	6 00	4 25	-	-	-	3 75	-	-	-	-
Stone coping, 10 inches (lineal foot),	-	-	-	-	-	-	1 76	-	-	-	-
Stone coping, 36 inches (lineal foot),	-	-	-	-	-	3 55	-	-	-	-	-
Stone in mortar (cubic yard),	-	-	-	-	-	5 30	-	-	-	-	-
Stone steps (lineal foot),	-	-	-	-	-	2 30	-	-	-	-	-

Surfacing.

Broken stone (square yard),	-	-	-	48	-	-	54	-	-	-	-
Broken stone (tons),	1 65	1 90	-	-	-	-	-	-	-	-	-
Gravel roadway (cubic yard),	1 50	-	-	-	-	-	-	-	-	-	09
Gravel roadway (square yard),	-	-	-	-	-	-	-	-	-	-	-
Gravel walk (cubic yard),	1 50	1 40	-	-	-	-	-	-	-	-	-
Gravel walk (square yard),	-	-	-	20	-	-	19	-	10	-	-
Loam (cubic yard),	35	-	-	-	-	-	-	-	30	-	-
Loam (cubic yard, including furnishing),	55	1 40	-	-	-	-	1 00	-	-	-	08
Loam (square yard),	-	-	-	09	-	-	-	-	-	-	-
Sodding (lineal foot),	-	-	-	03	-	-	-	-	02	-	-

APPORTIONMENT COMMISSION.

COMMONWEALTH OF MASSACHUSETTS.

SUPREME JUDICIAL COURT.

SUFFOLK COUNTY.

IN EQUITY.

IN THE MATTER OF THE PETITION OF WILLIAM B. DE LAS CASAS *et al.*, METROPOLITAN PARK COMMISSIONERS, FOR APPOINTMENT OF COMMISSIONERS TO DETERMINE PAYMENTS BY CITIES AND TOWNS UNDER ACTS OF 1899, CHAPTER 419.

PETITION.

Respectfully represent William B. de las Casas, Edwin B. Haskell, Edwin U. Curtis, David N. Skillings and Ellerton P. Whitney, your petitioners:—

That they constitute the Board of Metropolitan Park Commissioners, duly established under and by virtue of an act of the Legislature of Massachusetts, entitled “An Act to establish a Metropolitan Park Commission,” being chapter 407 of the Acts passed in the year A.D. 1893, and acting under said act, and acts in amendment thereof and in addition thereto.

That in and by section 1 of chapter 419 of the Acts of the Legislature of the year 1899 (a copy of which, together with a copy of section 2 of said last-mentioned act, is hereto annexed, marked “Exhibit A”) it is provided that, in order to determine the proportionate sums annually to be paid into the treasury of the Commonwealth by the various cities and towns within the Metropolitan Parks District, beginning with the first day of January in the year 1900, and continuing until the first day of January in the year in which a new award is made, as therein provided, to meet the interest and sinking fund requirements therein provided for, and to provide the amount required to meet the expenses of said Board, and of the care, maintenance and operation of the parks, reservations, boulevards and other works acquired, cared for and controlled by said Board, as therein provided, there shall be three Commissioners appointed for that purpose by this honorable court, on petition of this Board.

That, for the purpose of carrying out the provisions of said acts, it is necessary and expedient that said Commissioners be appointed by the court as aforesaid.

They therefore pray that, after such notice as this honorable court shall order, if any, there may be three Commissioners appointed, in the manner and for the purposes, and with all the rights, powers, privileges, duties and obligations in said act of 1899 mentioned or referred to.

And for greater certainty in all matters and things connected with this petition, and the subject matter thereof, your petitioners crave leave to refer to the Acts of 1893, chapter 407, and all acts in amendment thereof and in addition thereto.

WILLIAM B. DE LAS CASAS,
EDWIN B. HASKELL,
EDWIN U. CURTIS,
DAVID N. SKILLINGS,
ELLERTON P. WHITNEY,
Metropolitan Park Commissioners.

By their Attorney,
FREDERICK E. HURD.

FILED March 26, 1900.

EXHIBIT A.

[St. 1899, c. 419, §§ 1, 2.]

SECTION 1. In the year nineteen hundred and in every fifth year thereafter the supreme judicial court in equity, on application of the metropolitan park commission or of the attorney-general, or of any city or town of the metropolitan parks district by its attorney, and after such notice as the said court may order to each city and town of that district, shall appoint three commissioners, neither of whom shall be a resident of any city or town in said district, who shall, after such notice and hearing as they deem sufficient and in such manner as they deem just and equitable, determine and make award of the proportions in which each of the cities and towns of said district shall annually pay money into the treasury of the Commonwealth, beginning with the first day of January of the year in which such commissioners are required to be appointed, until the first day of January of the year in which a new award is made hereunder, to provide the amount for that year as estimated by the treasurer of the Commonwealth to meet the interest and sinking fund requirements of the appropriations and loans authorized by chapter four hundred and seven of the acts of the year eighteen hundred and ninety-three, chapter two hundred and eighty-eight of the acts of the year eighteen hundred and ninety-four, chapter three hundred and five of the acts of the year eighteen hundred and ninety-five, and all acts in addition thereto and in amendment thereof, and the

amount required to meet the expenses for that year of said board of metropolitan park commissioners, and of the care, maintenance, and operation for that year of the parks, reservations, boulevards and other works acquired, cared for or controlled by said board under said acts, as annually authorized by the general court, and the deficiency, if any, in the estimates and payments for the preceding year as found by said treasurer, and shall return their award thus determined into said court: *provided, however*, that the commissioners shall fix and return the proportion to be paid by the city of Boston for each year of the first of said terms at fifty per cent. Every such award when accepted by said court shall be a final and conclusive adjudication for the term for which it is made, of all matters referred to the commissioners, and shall be binding upon all parties.

SECTION 2. The treasurer shall in the year nineteen hundred and in each year thereafter estimate the several amounts required for that year from each city and town of said district, in accordance with said award, to provide the entire amount needed to meet the interest and sinking fund requirements of the appropriations and loans authorized by said chapter four hundred and seven of the acts of the year eighteen hundred and ninety-three, and acts in addition thereto and in amendment thereof, and to meet the expenses for that year of said metropolitan park commission incurred under said acts, and of the care, maintenance and operation of the parks, reservations and works acquired, cared for and controlled by said board under said acts, and the deficiency in the estimates and payments for these purposes for the previous year; and the treasurer shall also in the same manner estimate the several amounts required for that year from each city and town of said district, to provide one-half of the entire amount needed to meet the interest and sinking fund requirements of the appropriations and loans authorized by chapter two hundred and eighty-eight of the acts of the year eighteen hundred and ninety-four, and acts in addition thereto and in amendment thereof, and one-half of the expenses for that year of said metropolitan park commission under said acts, and of the care, maintenance and operation of the roads, boulevards, and other works acquired, cared for and controlled by said board under said acts, and one-half of the deficiency in the estimates and payments under said acts for these purposes for the preceding year, and shall include the several amounts thus estimated to be needed each year from each city and town of said district in the sum to be paid by each as its state tax for that year, and shall charge the remaining one half of the entire amount required for that year for interest, sinking fund

requirements, and for expenses and deficiency, as aforesaid, under said chapter two hundred and eighty-eight of the acts of the year eighteen hundred and ninety-four to the Commonwealth, and shall include the same in the annual state tax for that year; and the amounts thus required in each year of the several cities and towns of said district and of the Commonwealth shall be paid by each into the treasury of the Commonwealth at the time required for the payment and as a part of the state tax of each for that year.

DECREE.

And now, upon the above entitled petition, it appearing to the court that due notice thereof was given to all cities and towns, respondents, according to the order of the court, and after due hearing thereof, no person objecting, it is ordered that Charles Francis Adams of Lincoln, Thomas M. Stetson of New Bedford and John C. Hammond of Northampton be, and they are hereby, appointed Commissioners under section 1 of chapter 419 of the Acts of the year 1899, to determine and make award of the proportions in which each of the cities and towns of said district shall annually pay money into the treasury of the Commonwealth, beginning with the first day of January in the year 1900, until the first day of January of the year in which a new award is made as provided for by said act; to provide the amount for each of said years, as estimated by the Treasurer of the Commonwealth, to meet the interest and sinking fund requirements therein provided for, and to provide the amount required to meet the expenses of said Board of Metropolitan Park Commissioners, and of the care, maintenance and operation of the parks, reservations, boulevards and other works acquired, cared for and controlled by said Board as therein provided, and the deficiency, if any, in the estimates and payments for the preceding year as found by said Treasurer; and to do and perform all the other duties prescribed for them by said act, and to exercise all the powers thereby and by law reposed upon the said Commissioners as provided for by said act and hereby appointed.

By the court,

JOHN NOBLE,

JUNE 29, 1900.

Clerk.

REPORT OF THE DETERMINATION AND AWARD

made by the Commissioners appointed in the above entitled cause by decree made June 29, 1900.

The undersigned Commissioners, appointed by the said decree in the above entitled cause under section 1 of chapter 419 of the Acts

of the year 1899, to determine and make award of the proportions in which each of the cities and towns in said district shall annually pay money into the treasury of the Commonwealth, as more fully appears in said statute and in said decree, met on Saturday, July 14, 1900, and appointed Aug. 6, 1900, at 10 o'clock A.M., at Room 227 at the State House, as the time and place for hearing all parties interested; and we caused due notice, deemed sufficient by us, to be given to the Attorney-General, to the Metropolitan Park Commission and to each and every of the cities and towns of the Metropolitan Parks District, including the towns of Cohasset and Westwood.

Return of service is on file in this case.

All the parties notified appeared at the hearing, and were duly and sufficiently heard.

Said hearing took place on the sixth day of August, 1900, and by due adjournments on the seventh, twenty-first, twenty-second, and twenty-third days of said month.

Further meetings for consultation and for views of premises under consideration were had by us on the following days: August 24, 25, 30, and 31, September 10 and 11; and the Commissioners individually gave various other days to study and review of all the evidence in the case.

I. And now, having fully considered the evidence, arguments and circumstances, we determine and make award of the proportions in which each city and town shall annually pay money into the treasury of the Commonwealth, at the times, in the manner and for all the purposes of said chapter 419, as follows, viz., in the percentage proportions set against the names of said cities and towns respectively (the same being by us deemed just and equitable), as shown in the following:—

Table A.

Names.	Percentage Proportions.	Names.	Percentage Proportions.
1. Boston, . . .	.50000	13. Woburn, . . .	.00728
2. Cambridge, . . .	.05499	14. Arlington, . . .	.00804
3. Chelsea, . . .	.01456	15. Belmont, . . .	.00431
4. Everett, . . .	.01210	16. Braintree, . . .	.00341
5. Lynn, . . .	.02859	17. Brookline, . . .	.06029
6. Malden, . . .	.02481	18. Canton, . . .	.00417
7. Medford, . . .	.02443	19. Dedham, . . .	.00779
8. Melrose, . . .	.00823	20. Dover, . . .	.00099
9. Newton, . . .	.05154	21. Hingham, . . .	.00327
10. Quincy, . . .	.01313	22. Hull, . . .	.00418
11. Somerville, . . .	.03472	23. Hyde Park, . . .	.00761
12. Waltham, . . .	.01334	24. Milton, . . .	.03043

Names.	Percentage Proportions.	Names.	Percentage Proportions.
25. Nahant, . . .	.00728	33. Wellesley, . . .	.00565
26. Needham, . . .	.00231	34. Weston, . . .	.00483
27. Revere, . . .	.01376	35. Westwood, . . .	.00098
28. Saugus, . . .	.00234	36. Weymouth, . . .	.00491
29. Stoneham, . . .	.00346	37. Winchester, . . .	.01019
30. Swampscott, . . .	.00420	38. Winthrop, . . .	.00480
31. Wakefield, . . .	.00388		—
32. Watertown, . . .	.00920		1.00000

II. And we also made award of the proportions in which each city and town shall annually pay money into the treasury of the Commonwealth, at the times, in the manner and for all the purposes of an act to authorize the Metropolitan Park Commission to take, control and manage Nantasket Beach and adjacent lands and waters, being Acts of 1899, c. 464. The proportions (the same being by us deemed just and equitable) are as follows, viz., the percentage proportions set against the names of said cities and towns respectively, in the following:—

Table B.

Names.	Percentage Proportions.	Names.	Percentage Proportions.
1. Boston, . . .	.5000000	22. Hingham, . . .	.0032046
2. Cambridge, . . .	.0538902	23. Hull, . . .	.0041013
3. Chelsea, . . .	.0142688	24. Hyde Park, . . .	.0074578
4. Everett, . . .	.0118580	25. Milton, . . .	.0298214
5. Lynn, . . .	.0280182	26. Nahant, . . .	.0071344
6. Malden, . . .	.0243089	27. Needham, . . .	.0022589
7. Medford, . . .	.0239365	28. Revere, . . .	.0134848
8. Melrose, . . .	.0080654	29. Saugus, . . .	.0022932
9. Newton, . . .	.0505141	30. Stoneham, . . .	.0033859
10. Quincy, . . .	.0128723	31. Swampscott, . . .	.0041209
11. Somerville, . . .	.0340305	32. Wakefield, . . .	.0038024
12. Waltham, . . .	.0130732	33. Watertown, . . .	.0090160
13. Woburn, . . .	.0071344	34. Wellesley, . . .	.0055419
14. Arlington, . . .	.0078743	35. Weston, . . .	.0047285
15. Belmont, . . .	.0042238	36. Westwood, . . .	.0009555
16. Braintree, . . .	.0033467	37. Weymouth, . . .	.0048069
17. Brookline, . . .	.0590793	38. Winchester, . . .	.0099911
18. Canton, . . .	.0040866	39. Winthrop, . . .	.0046991
19. Cohasset, . . .	.0100000		—
20. Dedham, . . .	.0076391		1.0000000
21. Dover, . . .	.0009751		

It was the contention of the town of Westwood that we had no jurisdiction to assess anything against that town. We did not approve such contention.

It was the claim of the town of Cohasset that its liability did not extend to any part of the Metropolitan Parks System provided for by law prior to said chapter 464. We approved this claim.

We append hereto (Paper C, annexed) sundry alternative findings, which are to be used and become parts of this award only in the contingencies referred to in said Paper C.

CHARLES FRANCIS ADAMS.
THOMAS M. STETSON.
JOHN C. HAMMOND.

Paper C.

I. If there is error in the award in respect of Cohasset and none in respect of Westwood, then, in place of Tables A and B, Table B is to be substituted, and is to relate to both said chapters 419 and 464, and is to declare the apportionments required by both said chapters.

II. If there is error in the award in respect of Westwood and none in respect of Cohasset, then, in place of Table A, Table D, annexed hereto, is to be substituted.

Table D.

Names.	Percentage Proportions.	Names.	Percentage Proportions.
1. Boston, . . .	.50000	21. Hingham, . . .	.00328
2. Cambridge, . . .	.05510	22. Hull, . . .	.00419
3. Chelsea, . . .	.01459	23. Hyde Park, . . .	.00763
4. Everett, . . .	.01212	24. Milton, . . .	.03049
5. Lynn, . . .	.02865	25. Nahant, . . .	.00730
6. Malden, . . .	.02486	26. Needham, . . .	.00231
7. Medford, . . .	.02448	27. Revere, . . .	.01379
8. Melrose, . . .	.00824	28. Saugus, . . .	.00234
9. Newton, . . .	.05164	29. Stoneham, . . .	.00347
10. Quincy, . . .	.01315	30. Swampscott, . . .	.00421
11. Somerville, . . .	.03478	31. Wakefield, . . .	.00389
12. Waltham, . . .	.01337	32. Watertown, . . .	.00922
13. Woburn, . . .	.00729	33. Wellesley, . . .	.00566
14. Arlington, . . .	.00805	34. Weston, . . .	.00484
15. Belmont, . . .	.00432	35. Weymouth, . . .	.00492
16. Braintree, . . .	.00342	36. Winchester, . . .	.01021
17. Brookline, . . .	.06041	37. Winthrop, . . .	.00481
18. Canton, . . .	.00418		
19. Dedham, . . .	.00780		
20. Dover, . . .	.00099		
			1.00000

C. F. A.
T. M. S.
J. C. H.

And in place of Table B is to be substituted:—

Table E.

Names.	Percentage Proportions.	Names.	Percentage Proportions.
1. Boston, . . .	.50000	21. Dover, . . .	.00098
2. Cambridge, . . .	.05400	22. Hingham, . . .	.00321
3. Chelsea, . . .	.01430	23. Hull, . . .	.00411
4. Everett, . . .	.01188	24. Hyde Park, . . .	.00747
5. Lynn, . . .	.02808	25. Milton, . . .	.02988
6. Malden, . . .	.02436	26. Nahant, . . .	.00715
7. Medford, . . .	.02399	27. Needham, . . .	.00226
8. Melrose, . . .	.00809	28. Revere, . . .	.01351
9. Newton, . . .	.05061	29. Saugus, . . .	.00230
10. Quincy, . . .	.01289	30. Stoneham, . . .	.00339
11. Somerville, . . .	.03410	31. Swampscott, . . .	.00413
12. Waltham, . . .	.01309	32. Wakefield, . . .	.00381
13. Woburn, . . .	.00714	33. Watertown, . . .	.00903
14. Arlington, . . .	.00789	34. Wellesley, . . .	.00555
15. Belmont, . . .	.00423	35. Weston, . . .	.00474
16. Braintree, . . .	.00335	36. Weymouth, . . .	.00482
17. Brookline, . . .	.05919	37. Winchester, . . .	.01001
18. Canton, . . .	.00410	38. Winthrop, . . .	.00471
19. Cohasset, . . .	.01000		
20. Dedham, . . .	.00765		1.00000

III. If there is error in the award in respect of both Cohasset and Westwood, then, in place of Tables A and B, said Table E is to be substituted, and is to relate to both said chapters 419 and 464, and is to declare the apportionments required by both said chapters.

C. F. A.
T. M. S.
J. C. H.

FILED Sept. 11, 1900.

DECREE.

This case came on to be heard at this term, and was argued by counsel; and thereupon, upon consideration thereof, it is ordered, adjudged and decreed that the award of Charles Francis Adams, Esq., Thomas M. Stetson, Esq., and John C. Hammond, Esq., commissioners heretofore appointed in this case in accordance with the prayer of said petition, which award was returned into this court Sept. 11, 1900, be accepted and made binding upon the parties.

By the court,

C. H. COOPER,

Assistant Clerk.

SEPT. 25, 1900.

APPEAL OF THE TOWN OF WESTWOOD.

The town of Westwood hereby appeals from the decree hitherto entered in said case confirming the report of the commissioners appointed in the same, and determining that it was liable to be included in the apportionment provided for by chapter 419 of the Acts of 1899.

TOWN OF WESTWOOD,

By its Attorney,

CHARLES F. JENNEY.

FILED Oct. 8, 1900.

APPEAL OF THE TOWN OF BROOKLINE.

And now comes the town of Brookline, one of the respondents in the above entitled cause, and says that it is aggrieved by the decree in said cause made on Sept. 25, 1900, and it claims an appeal from said decree to the full court.

TOWN OF BROOKLINE,

By its Attorney,

CHARLES A. WILLIAMS.

FILED Oct. 15, 1900.

ESTIMATED ANNUAL REQUIREMENTS.

The following tables were prepared in the office of the State Treasurer, showing the amounts required for the year 1900 of each city and town of the metropolitan parks district, according to the proportion set forth in the award of the Apportionment Commission. They have not been collected, as the appeal from that award is still pending.

Sinking Fund Requirements.

CITIES AND TOWNS.	Proportion of Park Sinking Fund.	Proportion of Boulevard Sink- ing Fund.	Proportion of Nantasket Sink- ing Fund.	Totals.
Boston, . .	\$47,595 89	\$10,358 07	\$4,132 63	\$62,086 59
Cambridge, . .	5,234 60	1,139 18	445 42	6,819 20
Chelsea, . .	1,385 99	301 63	117 94	1,805 56
Everett, . .	1,151 82	250 66	98 01	1,500 49
Lynn, . .	2,721 53	592 27	231 58	3,545 38
Malden, . .	2,361 71	513 97	200 92	3,076 60
Medford, . .	2,325 53	506 09	197 84	3,029 46
Melrose, . .	783 43	170 49	66 66	1,020 58
Newton, . .	4,906 18	1,067 71	417 51	6,391 40
Quincy, . .	1,249 87	272 00	106 39	1,628 26
Somerville, . .	3,305 06	719 26	281 27	4,305 59
Waltham, . .	1,269 86	276 35	108 05	1,654 26
Woburn, . .	693 00	150 81	58 97	902 78
Arlington, . .	765 34	166 56	65 08	996 98
Belmont, . .	410 28	89 29	34 91	534 48
Braintree, . .	324 60	70 64	27 66	422 90
Brookline, . .	5,739 11	1,248 98	488 31	7,476 40
Canton, . .	396 95	86 39	33 78	517 12
Cohasset, . .	-	-	82 65	82 65
Dedham, . .	741 54	161 38	63 14	966 06
Dover, . .	94 24	20 51	8 06	122 81
Hingham, . .	311 28	67 74	26 49	405 51
Hull, . .	397 90	86 59	33 90	518 39
Hyde Park, . .	724 41	157 65	61 64	943 70
Milton, . .	2,896 69	630 39	246 48	3,773 56
Nahant, . .	693 00	150 81	58 97	902 78
Needham, . .	219 89	47 85	18 67	286 41
Revere, . .	1,309 84	285 05	111 46	1,706 35
Saugus, . .	222 75	48 48	18 95	290 18
Stoneham, . .	329 36	71 68	27 98	429 02
Swampscott, . .	399 81	87 01	34 06	520 88
Wakefield, . .	369 34	80 38	31 43	481 15
Watertown, . .	875 76	190 59	74 52	1,140 87
Wellesley, . .	537 83	117 05	45 81	700 69
Weston, . .	459 78	100 06	39 08	598 92
Westwood, . .	93 29	20 30	7 90	121 49
Weymouth, . .	467 39	101 72	39 73	608 84
Winchester, . .	970 00	211 10	82 58	1,263 68
Winthrop, . .	456 92	99 44	38 84	595 20
Totals, . .	\$95,191 77	\$20,716 13	\$8,265 27	\$124,173 17

Interest Requirements.

CITIES AND TOWNS.	Proportion of Park Interest.	Proportion of Boulevard Interest.	Proportion of Nantasket Interest.	Totals.
Boston, . . .	\$106,125 00	\$23,000 00	\$9,000 00	\$138,125 00
Cambridge, . .	11,671 63	2,529 54	970 02	15,171 19
Chelsea, . . .	3,090 36	669 76	256 84	4,016 96
Everett, . . .	2,568 22	556 60	213 44	3,338 26
Lynn, . . .	6,068 23	1,315 14	504 33	7,887 70
Malden, . . .	5,265 92	1,141 26	437 56	6,844 74
Medford, . . .	5,185 27	1,123 78	430 86	6,739 91
Melrose, . . .	1,746 82	378 58	145 18	2,270 58
Newton, . . .	10,939 36	2,370 84	909 25	14,219 45
Quincy, . . .	2,786 84	603 98	231 70	3,622 52
Somerville, . .	7,369 32	1,597 12	612 55	9,578 99
Waltham, . . .	2,831 41	613 64	235 32	3,680 37
Woburn, . . .	1,545 18	334 88	128 42	2,008 48
Arlington, . .	1,706 49	369 84	141 74	2,218 07
Belmont, . . .	914 80	198 26	76 03	1,189 09
Braintree, . .	723 77	156 86	60 24	940 87
Brookline, . .	12,796 55	2,773 34	1,063 43	16,633 32
Canton, . . .	835 08	191 82	73 56	1,150 46
Cohasset, . . .	-	-	180 00	180 00
Dedham, . . .	1,653 43	358 34	137 50	2,149 27
Dover, . . .	210 13	45 54	17 55	273 22
Hingham, . . .	694 06	150 42	57 68	902 16
Hull, . . .	887 20	192 28	73 82	1,153 30
Hyde Park, . .	1,615 22	350 06	134 24	2,099 52
Milton, . . .	6,458 77	1,399 78	536 79	8,395 34
Nahant, . . .	1,545 18	334 88	128 42	2,008 48
Needham, . . .	490 30	106 26	40 66	637 22
Revere, . . .	2,920 56	632 96	242 73	3,796 25
Saugus, . . .	496 66	107 64	41 28	645 58
Stoneham, . .	734 39	159 16	60 95	954 50
Swampscott, . .	891 45	193 20	74 18	1,158 83
Wakefield, . .	823 53	178 48	68 44	1,070 45
Watertown, . .	1,952 70	423 20	162 29	2,538 19
Wellesley, . .	1,199 21	259 90	99 75	1,558 86
Weston, . . .	1,025 17	222 18	85 11	1,332 46
Westwood, . .	208 01	45 08	17 20	270 29
Weymouth, . .	1,042 15	225 86	86 52	1,354 53
Winchester, . .	2,162 83	468 74	179 84	2,811 41
Winthrop, . .	1,018 80	220 80	84 58	1,324 18
Totals, . . .	\$212,250 00	\$46,000 00	\$18,000 00	\$276,250 00

Maintenance Requirements.

CITIES AND TOWNS.	Proportion of Park Mainte- nance.	Proportion of Boulevard Maintenance.	Proportion of Nantasket Maintenance.	Totals.
Boston, . . .	\$44,250 00	\$11,250 00	\$3,250 00	\$58,750 00
Cambridge, . .	4,866 62	1,237 28	350 29	6,454 19
Chelsea, . . .	1,288 56	327 60	92 75	1,708 91
Everett, . . .	1,070 85	272 25	77 08	1,420 18
Lynn,	2,530 22	643 28	182 12	3,355 62
Malden, . . .	2,195 69	558 23	158 01	2,911 93
Medford, . . .	2,162 06	549 68	155 59	2,867 33
Melrose, . . .	728 36	185 18	52 42	965 96
Newton, . . .	4,561 29	1,159 65	328 34	6,049 28
Quincy, . . .	1,162 01	295 43	83 67	1,541 11
Somerville, . .	3,072 72	781 20	221 20	4,075 12
Waltham, . . .	1,180 59	300 15	84 98	1,565 72
Woburn, . . .	644 28	163 80	46 37	854 45
Arlington, . .	711 54	180 90	51 18	943 62
Belmont, . . .	381 44	96 98	27 45	505 87
Braintree, . .	301 79	76 73	21 75	400 27
Brookline, . .	5,335 67	1,356 53	384 02	7,076 22
Canton, . . .	369 05	93 83	26 56	489 44
Cohasset, . . .	—	—	65 00	65 00
Dedham, . . .	689 41	175 27	49 65	914 33
Dover,	87 61	22 27	6 34	116 22
Hingham, . . .	289 39	73 57	20 83	383 79
Hull,	369 93	94 05	26 66	490 64
Hyde Park, . .	673 48	171 22	48 48	893 18
Milton,	2,693 05	684 67	193 84	3,571 56
Nahant, . . .	644 28	163 80	46 37	854 45
Needham, . . .	204 43	51 97	14 68	271 08
Revere,	1,217 76	309 60	87 65	1,615 01
Saugus,	207 09	52 65	14 91	274 65
Stoneham, . . .	306 21	77 85	22 01	406 07
Swampscott, . .	371 70	94 50	26 79	492 99
Wakefield, . .	343 38	87 30	24 72	455 40
Watertown, . .	814 20	207 00	58 60	1,079 80
Wellesley, . .	500 02	127 12	36 02	663 16
Weston,	427 45	108 67	30 74	566 86
Westwood, . . .	86 73	22 05	6 21	114 99
Weymouth, . .	434 53	110 47	31 24	576 24
Winchester, . .	901 81	229 27	64 94	1,196 02
Winthrop, . . .	424 80	108 00	30 54	563 34
Totals,	\$88,500 00	\$22,500 00	\$6,500 00	\$117,500 00

Total Requirements.

Boston, . . .	\$258,961 59	Hingham, . . .	\$1,691 46
Cambridge, . . .	28,444 58	Hull, . . .	2 162 33
Chelsea, . . .	7,531 43	Hyde Park, . . .	3,936 40
Everett, . . .	6,258 93	Milton, . . .	15,740 46
Lynn, . . .	14,788 70	Nahant, . . .	3,765 71
Malden, . . .	12,833 27	Needham, . . .	1,194 71
Medford, . . .	12,636 70	Revere, . . .	7,117 61
Melrose, . . .	4,257 12	Saugus, . . .	1,210 41
Newton, . . .	26,660 13	Stoneham, . . .	1,789 59
Quincy, . . .	6,791 89	Swampscott, . . .	2,172 70
Somerville, . . .	17,959 70	Wakefield, . . .	2,007 00
Waltham, . . .	6,900 35	Watertown, . . .	4,758 86
Woburn, . . .	3,765 71	Wellesley, . . .	2,922 71
Arlington, . . .	4,158 67	Weston, . . .	2,498 24
Belmont, . . .	2,229 44	Westwood, . . .	506 77
Braintree, . . .	1,764 04	Weymouth, . . .	2,539 61
Brookline, . . .	31,185 94	Winchester, . . .	5,271 11
Canton, . . .	2,157 02	Winthrop, . . .	2,482 72
Cohasset, . . .	327 65		
Dedham, . . .	4,029 66	Total, . . .	\$517,923 17
Dover, . . .	512 25		

SPECIAL REPORT ON DEDHAM BOULE- VARD.

[ACTS OF 1899, CHAPTER 415.]

AN ACT RELATIVE TO THE CONSTRUCTION OF A BOULEVARD FROM THE TOWN OF DEDHAM TO THE STONY BROOK RESERVATION IN THE TOWN OF HYDE PARK.

SECTION 1. The metropolitan park commission is hereby authorized and instructed to investigate the advisability of taking land for and constructing a road or boulevard between the town of Dedham and the Stony Brook reservation of the metropolitan park system, from Boyden square in said town, being the junction of High street, Walnut street, Milton street, Bussey street and Central street in said town, over said Central street and across Mother brook to the junction of Emmett avenue and Oakland street, thence to and over private lands to the Hyde Park line and in the said town of Hyde Park to the Stony brook reservation of the metropolitan park system. Said commission shall consider the cost of construction, and shall report the result of its investigation, together with its recommendations, to the next general court not later than the fifteenth day of January next. Any expense incurred under this act shall be paid from the unexpended balance of the general appropriation for metropolitan boulevards.

SECTION 2. This act shall take effect upon its passage. [*Approved May 25, 1899.*]

[HOUSE, No. 1079, 1900.]

COMMONWEALTH OF MASSACHUSETTS.

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled.

The Metropolitan Park Commission submit herewith a special report upon the matter of a road or boulevard between Boyden Square in the town of Dedham and the Stony Brook Reservation of the Metropolitan Park System, as directed by chapter 415 of the Acts of 1899.

The Commissioners have familiarized themselves with the subject matter of the report by examination of the ground and by

the investigations and reports of their Landscape Architect and Engineer.

Dedham is a town within the Metropolitan Parks District. Boyden Square is at the easterly side of the well-settled portion of the town, and just across Mother Brook from Oakland Street, its most easterly street towards the Stony Brook Reservation. The distance from this last street to Stony Brook Reservation in a straight line is about one mile. The intervening land is for the most part rocky and uneven, with a sparse and very poor tree growth, unsuited for agriculture and quite undeveloped for any other purpose.

In considering the matter of the suggested road or boulevard, the Commission has come to several preliminary conclusions, which are the basis of its final conclusion and report. They are as follows :—

Dedham is so situated on the outer border of the Metropolitan Parks District that connection between it and the rest of the District is inconvenient. Portions of Charles River and Mother Brook lie within its town limits, and, if the takings which have been recommended along these streams are authorized and made, the town will contain considerable portions of the Metropolitan Parks System. The ultimate construction of drives along the banks of these streams will afford considerable pleasure drives at the expense of the District, but their course will of necessity be devious, and therefore will not materially improve communication with the centre of the District. The principal public roads now leading towards the centre of the District are narrow and inconvenient, and are encumbered by street railway tracks. In spite of its apparent remoteness and inconvenience of approach, however, that part of Dedham known as Boyden Square is only about one mile from the driving road through Stony Brook Reservation, which connects with the West Roxbury Parkway and thence with Arnold Arboretum of the Boston park system. It is apparent, therefore, that a road one mile long from Boyden Square to a convenient point in the road through the Stony Brook Reservation will bring Dedham into most direct connection with the entire Metropolitan Park System and the Boston park system, and will be, in effect, part of a park road leading directly into the centre of Boston itself.

It would seem fair, however, that only a portion of such a roadway should, in any event, be provided at the expense of the Metropolitan Parks District. Between Boyden Square and the private land on the easterly side of the junction of Oakland Street and Emmett Avenue, the route prescribed as that to be considered

under the act directing this report includes a bridge across Mother Brook and a public street, both of which are used and required for public traffic. The bridge is built over a dam which is essential to manufacturing interests on Mother Brook. There is no good reason why either this road or the bridge or dam should become part of a parkway. The Commission has, therefore, dismissed this part of the suggested parkway from its consideration, and has confined its estimates to the portion which would lie across lands between the junction of Oakland Street and Emmett Avenue and the Stony Brook Reservation. The plan for such a parkway, recommended as a preliminary plan by the Landscape Architect and approved as such by this Commission, provides for the acquirement of a strip of land in extension of the reservation to Oakland Street of sufficient width to permit the construction over it of a road similar to that now built through the reservation itself and of two border roads. The central road would be the driving road and the outer roads would ultimately be public roads, but for the present would be mere paths or fire-guards to protect a tree growth to be developed between them and the driving road. Such a strip of land and such construction are likely to cost \$40,000.

Respectfully submitted,

WILLIAM B. DE LAS CASAS,
EDWIN B. HASKELL,
EDWIN U. CURTIS,
DAVID N. SKILLINGS,
ELLERTON P. WHITNEY,

Metropolitan Park Commissioners.

SPECIAL REPORT ON BOULEVARD THROUGH SOMERVILLE AND CAMBRIDGE.

[HOUSE, No. 1083, 1900.]

COMMONWEALTH OF MASSACHUSETTS.

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled.

The Metropolitan Park Commission submit herewith a special report, as directed by chapter 273 of the Acts of 1899, in regard to the advisability of taking land and constructing a road or boulevard between the Middlesex Fells Parkway at Mystic River and a point on Charles River near Cottage Farm. The act reads as follows : —

[ACTS OF 1899, CHAPTER 273.]

AN ACT RELATIVE TO THE CONSTRUCTION OF A BOULEVARD FROM
THE MIDDLESEX FELLS PARKWAY TO THE CHARLES RIVER.

SECTION 1. The metropolitan park commission is hereby authorized and instructed to investigate the advisability of taking lands for and constructing a road or boulevard from Broadway park in the city of Somerville, at the southerly end of the Middlesex fells parkway, or from any other point in said parkway near the Mystic river, to the Charles River at or near Cottage Farm. Said commission shall consider the various practicable routes and the cost of construction, and shall report the result of its investigation, together with its recommendations to the next general court. Any expense incurred under this act shall be deducted from the unexpended balance of the general appropriation for metropolitan boulevards.

SECTION 2. This act shall take effect upon its passage. [*Approved April 15, 1899.*]

The Commissioners have familiarized themselves with the matter to be reported upon by examination of the ground and by the investigations and report of their Landscape Architects and Engineer, and more particularly by a study of the various purposes which the suggested road or boulevard would serve, and its probable cost. As a result, they early reached certain conclusions, which may properly be stated as the basis of their report : —

First. — A road or boulevard between Charles River and Mystic River, at or near the points suggested, is desirable and indeed necessary to the completeness of the Park System of the Metropolitan District.

Second. — Many other public needs besides those connected with the Park System require a more ample road than now exists between these points.

Third. — Considerations of economy suggest that all these public needs be provided for at one time.

The region to be crossed by the road or boulevard suggested by the act under which this report is made lies north of Charles River and wholly within three miles of the State House. It is a part of the compactly built central portion of the Metropolitan District in which population is giving way to business. The roads crossing it toward Mystic River are generally inadequate for present needs, and therefore a barrier to the development of the District. Charles River divides the District into a southerly half and a northerly half, and, in the same way, divides the parks and boulevards of the District into a south and a north system. South of Charles River the Boston parks, the Metropolitan parkways and reservations, and certain modern roads or boulevards, such as Beacon Street, Commonwealth Avenue and Blue Hill Avenue, are all so connected with each other as to form a well-united system, easily reached from the business centre of Boston itself, and affording easy access to that centre from all portions of the southerly half of the District. North of Charles River a different condition exists. Extending to Mystic River there is a congested territory divided between the cities of Cambridge and Somerville and the Charlestown District of Boston. Within this region there is no unity of government, and consequently no general plan of parkways or improved roads and boulevards. The esplanade along the southerly edge of Charles River leads to the west. Beyond Cambridge and Somerville the Metropolitan reservations and parkways are gradually being connected into a well-united system by a parkway from Charles River by Fresh Pond to Middlesex Fells, the banks of the Mystic River, the boulevard called Fellsway across Mystic River to Middlesex Fells, and the Parkway from Fellsway to Revere Beach. The Parkway from Charles River to Fresh Pond can never provide a direct communication between the northerly and southerly portions of the Park System. The rest of the northerly half of the Park System, however, unites with Fellsway at Mystic River, and thence forms a single parkway to Broadway Park in Somerville. Although this park is only about three miles from Charles River and the State House as the

crow flies, yet, by the park drives for which the land has thus far been secured, it will be about thirteen miles distant. As a consequence, Middlesex Fells and Revere Beach, each of which is from five to six miles distant from the State House in a straight line, will be distant by the park drives respectively about fourteen and twenty-two miles. Obviously, then, a short road or boulevard from Charles River to Broadway Park is desirable, and will be necessary if the North Metropolitan Park System is to be completed and brought within easy reach of Boston and the southerly half of the District, and if those living in the northerly half of the District are ever to be able to comfortably make use of the parks south of Charles River.

The cities and towns north of Charles River have long suffered for want of good roads to and from Boston. The explanation is simple. In early years the broad marshes about Mystic River were impassable, and the principal roads from Boston ran north through Charlestown or west through Cambridge. Population settled compactly about these roads, but avoided the marshes. The steam railroads, following the valleys between the hills, separated the population of Charlestown, Cambridge and Somerville, and formed a barrier to new roads to the north; the old roads remained narrow and unconnected. It was not until 1870 that a new road and bridge over Mystic River gave any approach whatever between Everett and Medford Square to the towns north of the Mystic marshes; and it was not until 1890 that the Harvard Bridge gave a new entrance to Boston across Charles River in the three miles between West Boston Bridge and Cottage Farm. Even Cross Street, which formerly gave the only line of easy communication between the Somerville hills, is now encumbered by electric car tracks, so that heavy traffic is poorly accommodated, and pleasure carriages are forced to seek the steep roads further west. In spite of these obstacles, however, there has been a great increase of population north of the Mystic River within the last few years, and a consequent increase in the need of easy communication with Boston, which has forced upon that city the rebuilding of Malden Bridge between Charlestown and Everett, and is now clamoring for the rebuilding of the bridge over Mystic River at Fellsway and Highland Avenue.

These facts are enough to warrant the conclusion that, aside from the mere requirement of a connection between the parks of the District, there is a practical business need for a wide, direct new road from Mystic River across Somerville and Cambridge to Boston. Nor is this need solely that of the cities and towns to the north. It is the need of the entire District, and especially of

Boston, whose prosperity is closely linked to that of the suburban cities and towns. The only reason that roads to satisfy such necessities were not provided long ago is found in the fact that they were required not so much by Somerville or Cambridge as by Boston and by the towns north of the Mystic River, and that there was no single agency by which such widely separated necessities could be met. The power of the Middlesex county commissioners to lay out roads through this region was taken away by the charters of the cities of Somerville and Cambridge. Now that the system of Metropolitan Parks is being provided for, however, there is reason and the opportunity for united action, together with the means of making such action bring the greatest benefit to the several cities and towns interested, at the least possible cost to each.

The barrier which the congested region between Charles River and Mystic River offers to all classes of transit was fully recognized when the general plan for the Metropolitan Park System was outlined in the report of the Preliminary Commission to the Legislature of 1893; but that Commission and its advisers believed that with the increasing demand there must come some ultimate solution of the problem. They therefore made Broadway Park in Somerville, which is about the same distance from the State House as Cottage Farm, the terminus of the northerly half of the proposed system.

The fact that the need exists for both a pleasure drive and a traffic road from the neighborhood of Broadway Park at Mystic River to Boston and the Park System south of Charles River, taken in connection with the great expense of providing for either class of travel, suggests the wisdom and economy of providing for both at one time by the simplest form of road which can be made to accommodate both. The rest of this report may therefore be confined to a consideration of the proper location for such a road and the proper form in which it should be laid out and constructed.

From Broadway Park the general course of a road or boulevard to accommodate both classes of travel at the least expense is easily determined as far as Washington Street in Somerville. Directness, economy and the necessity for providing an easy grade all require that the route should be east of Prospect Hill, where the buildings are mostly houses of a comparatively inexpensive sort, and where the grade can be made safe for driving and reasonable for traffic. A route further west would pass through pleasanter surroundings, but would be indirect and of difficult grades, and could not be made to provide for both classes

of traffic. Such a road would be a mere pleasure drive, and ought to be considered only in connection with some objective point further west. Doubtless such a pleasure drive may be desirable in the future as a means of communication with Cambridge, Brookline and Newton, but at present it would be a mere luxury. The fact that the road or boulevard here suggested would form the direct line of passage for all classes of travel makes it clear that the land abutting on it would soon be devoted to business purposes, and that the form of the road should therefore be either of the character of Fellsway, a double road with grass space in the centre and a restriction line for buildings, or, what is better, the more ample form of two traffic roads with a driving road in the centre between two grass spaces and rows of trees, and without restrictions for set-back of buildings from the traffic roads.

From Washington Street, Somerville, to Charles River the route is less evident, and, in the opinion of the Commission, cannot be wisely determined upon at the time of this report. The reasons for this conclusion may be briefly stated, and it is hoped will be found sufficient to warrant the Board's unwillingness to submit at this time a definite plan for this portion of the route.

Cottage Farm on the south side of Charles River is reached by an inadequate old bridge, which must soon be rebuilt or removed. It is in itself an unimportant point, being too far east for connection with the future bridges to Brookline, and too far west for convenient connection with the Park System of Boston or with the business or residential section of Boston. It must, therefore, be taken as merely suggestive of a general point of termination on Charles River. Other points not far removed suggest themselves as better points of termination. These are the proposed Magazine Street Bridge, the Charlesmouth Bridge and road to the Fens, and the Harvard Bridge or the new West Boston Bridge. These points are all connected by the esplanade being built by the city of Cambridge along the north bank of the river. Of these, however, only Harvard Bridge is as yet built, and it is uncertain when any other than the West Boston Bridge will be built. Aside from the uncertainty as to these matters, there is further cause for delay in the fact that a union of the steam railroads is now suggested, which, if it takes place, will undoubtedly simplify the location of tracks and have a great influence in the matter of eliminating grade crossings. Determination of these matters is almost essential to a determination of the best location for the suggested road and boulevard in this section. It seems possible, therefore, at this time to decide merely that the sug-

gested road and boulevard ought to have its terminus at either West Boston Bridge or Harvard Bridge, and that the form of construction ought to be that of two traffic roads with a park drive in the centre. Such a form of construction would utilize to a considerable extent existing roads, and would be but little more expensive than a double roadway or a broad single roadway, because the expense of taking the entire lots on one side of existing roads would be little more than that of taking portions of these lots. The cost of the road or boulevard thus suggested will be chiefly that of the necessary land, and construction will require no unusual expense except perhaps in connection with the crossing of the railroads.

In brief, then, this Board has reached the conclusion that there are many and diverse needs for the road and boulevard suggested by the act which directs this report, that these needs are increasing each year, and that it is wise to begin as soon as possible to provide for them. Economy suggests that a roadway, according to the best modern views, ought to be planned at once for both park and pleasure driving, and that the authority to provide such a road as far as may wisely be determined at this time ought to be given to this Board or to some other single agency.

In its opinion, such a road may be located at once along the most direct and economical line in Somerville between Broadway Park and a point on Washington Street near the railroad bridge over the Southern Division of the Boston & Maine Railroad. A road to this point will be in line for any location which can be availed of in the future to Charles River at West Boston Bridge or Harvard Bridge or any other point on the esplanade. The fact that the road is determined upon to this point will make it easier to determine the rest of the location in connection with the elimination of grade crossings. At the same time it will be complete in itself, because Washington Street is the highway between Harvard Square, Cambridge, and Sullivan Square, Charlestown, and the point of termination is that from which the best roads now connect with all existing bridges into Boston and the region south of Charles River. The construction of a short piece of single road from this point will form an improved connection with Prospect Street across Cambridge to Massachusetts Avenue; and probably some arrangement can be made with the city of Somerville to provide this road, and with the city of Cambridge to set aside either Prospect Street or the near-by Columbia Street as a road for pleasure travel.

The Board therefore considers the laying out and construction of a road or boulevard suggested by the act under which this report

is made as advisable from Broadway Park to Washington Street, Somerville. The cost of the land of this section of the roadway in the form suggested would probably be about \$600,000, and the cost of construction about \$150,000.

Respectfully submitted,

WILLIAM B. DE LAS CASAS, *Chairman*,
EDWIN B. HASKELL,
EDWIN U. CURTIS,
DAVID N. SKILLINGS,
ELLERTON P. WHITNEY,
Metropolitan Park Commissioners.



Commonwealth of Massachusetts
METROPOLITAN PARK COMMISSION
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SPECIAL REPORT ON CONNECTIONS BETWEEN REVERE BEACH, LYNN WOODS AND MIDDLESEX FELS.

[ACTS OF 1898, CHAPTER 501.]

AN ACT RELATIVE TO A BOULEVARD FROM THE POINT OF PINES TO LYNN WOODS, AND FROM LYNN WOODS TO THE MIDDLESEX FELS.

SECTION 1. The metropolitan park commission is hereby authorized and instructed to make an investigation as to the advisability of constructing a boulevard from the Point of Pines to Lynn woods, and from the Lynn woods to Middlesex fells. Said commission shall consider the various practical routes and the cost of construction, and shall report the result of its investigation, together with its recommendations, to the next general court. Any expense incurred under this act shall be deducted from the unexpended balance of the general appropriation for metropolitan boulevards.

SECTION 2. This act shall take effect upon its passage. [*Approved June 6, 1898.*]

[House, No. 1086, 1900.]

COMMONWEALTH OF MASSACHUSETTS.

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled.

The Metropolitan Park Commission submits herewith a special report in regard to a parkway or boulevard from the Point of Pines to Lynn Woods, and thence to Middlesex Fells, as directed by chapter 501 of the Acts of 1898.

The Point of Pines is at the northerly end of Revere Beach. Lynn Woods is a reservation of 2,000 acres of wild land on the northerly side of the city of Lynn, owned and developed by that city for a public park and source of water supply. Middlesex Fells is the second largest woods reservation of the Metropolitan Parks System, and, including the lands and waters of the Metropolitan and Winchester water systems, contains about 3,200 acres. No provision has yet been made for a parkway or boulevard

between these reservations, and there is no existing public street between them which is so well defined as to make it possible to pass easily and directly from one to the other.

The Commissioners have familiarized themselves with the subject-matter of this report by personal examination of the ground and by investigation and report of the Landscape Architect, Engineer and real estate expert. They have also given hearings to such committees and citizens of the cities and towns most directly interested in the matter as have asked for such hearings.

Between the Point of Pines, that is, Revere Beach, and Lynn Woods there are several possible routes for the suggested parkway or boulevard. Most of these routes lie through thickly settled portions of the city of Lynn, and if either were adopted many buildings would have to be acquired. The cost of the land would therefore be so great as to permit the acquirement of only enough width for a formal boulevard. Such a boulevard would provide little more than a wide city street through unattractive surroundings. One more westerly route is available, however, through lands comparatively unoccupied by buildings, which possesses the advantage of being readily accessible to both Lynn and Saugus and of still retaining considerable beauty of scenery. A parkway by this route would run along the south bank of Saugus River to Ballard Street in Saugus, thence across the river and through lands belonging chiefly to the city of Lynn between Holyoke Street and the Breed's Pond and Park Street entrances to Lynn Woods. It would have the charm of ample open space, views of river, brook and pond, and the bold scenery of the woods to which it gives approach. Besides accommodating Lynn, it would also bring Saugus and the country beyond into easy access with the Park System. The land for a parkway along this route is estimated as likely to cost about \$75,000. The cost of construction will be somewhat greater than by other routes; but the combined cost of both land and construction will be about the same as that by either of the other routes, leaving its greater amplitude, attractiveness and usefulness as elements to recommend it above other routes.

From Lynn Woods to Middlesex Fells only two routes are available. The topography of the intervening country makes it likely that no others will ever be considered available, while the trend of population is such that the cost of either will undoubtedly be greater in the future than now. The more northerly or Wakefield route is from the Great Woods Road of Lynn Woods along Howlett's Pond and Brook in Saugus to Hart's Hill and Crystal Lake in Wakefield, and thence south-westerly to the Fells

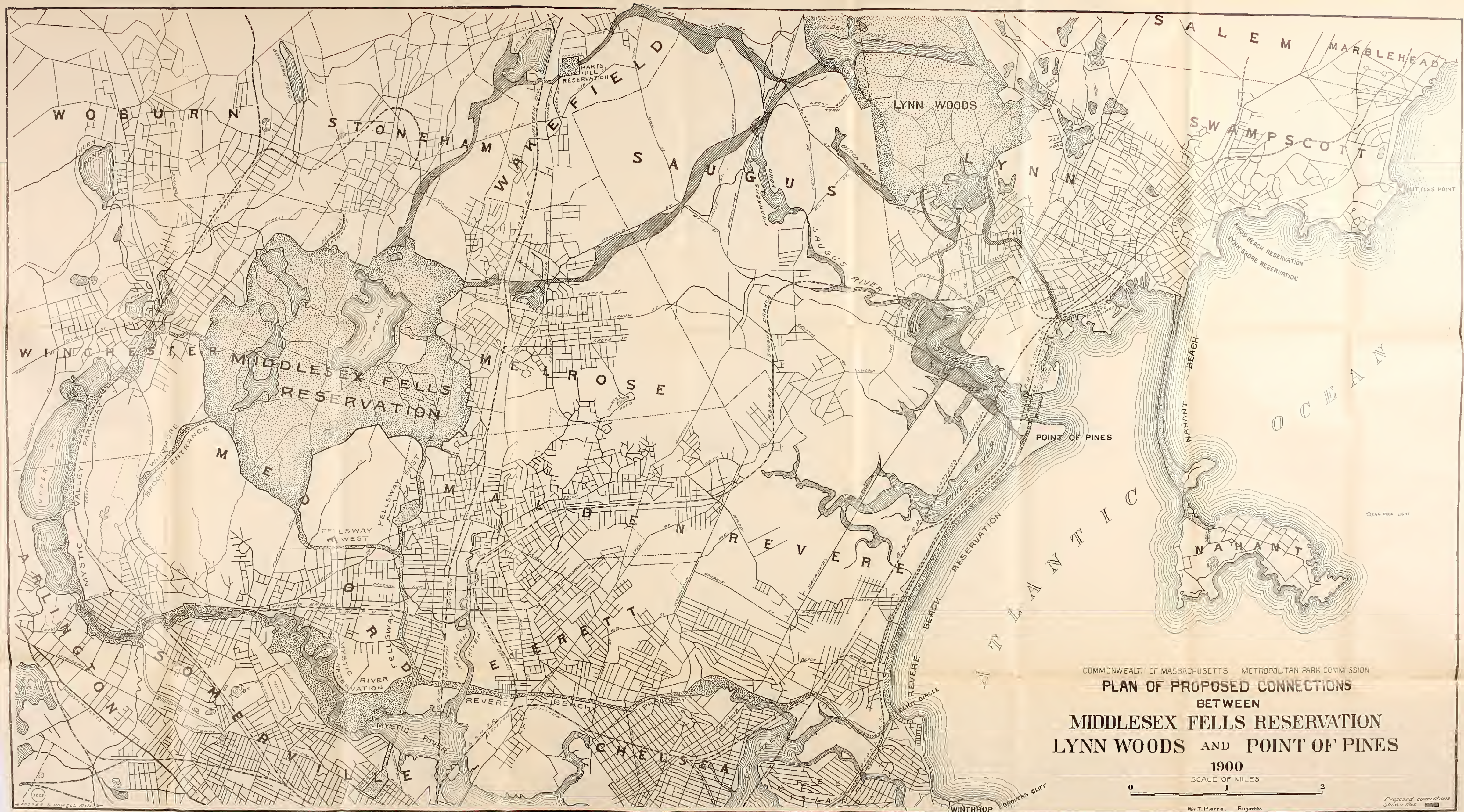
at Doleful Pond in Stoneham. This route would provide a parkway about six miles long, through scenery of much the same character as that of the reservations. To preserve its beauty would require ample takings, amounting almost to an extension of the reservations to meet each other. The most southerly or Melrose route is from the same Great Woods Road across the upper Saugus Meadows through an interval between the hills to Ell Pond in Melrose and thence to the Fells. Its length would be about four and one-half miles. The first two-thirds of the route would be through open lands of low cost, while the remaining land, except the park lands along Ell Pond, would be in a compactly settled and attractive portion of Melrose. Its scenery would be that of an interval parkway, attractive and restful in the midst of a large population, and a contrast to the wilder scenery of the reservations. The cost of the land for this route would be about \$75,000, which is about \$10,000 in excess of the estimated cost of the land by the Wakefield route. The cost of construction for the Melrose route would be about \$190,000, while that of the Wakefield route would be about \$226,000. By either route, however, partial construction would probably answer for many years to come. The choice between these two routes must rest on practical considerations other than those of attractiveness or accommodation to the city or town in which the parkway would lie. Taking all these considerations into account, the Commission regards the Melrose or interval route as most desirable. Its reasons, stated briefly, are: that this route is shorter; that it is available to a larger population, and will divide the northern half of the District more equitably; that its attractiveness is less dependent upon surrounding scenery, likely to be destroyed in time; and that its contrast to the scenery of the reservations will be a pleasant element of variety in the Park System. The Commission is inclined to suggest, however, that, as Wakefield is a large and growing town of the Parks District, and has provided itself with local parks of great beauty which will remain unconnected with the Park System, it is worthy of consideration whether provision might not also wisely be made at this time for acquiring the land for that portion of the Wakefield route between Middlesex Fells and Crystal Lake or Hart's Hill. A future parkway over this land would bring Wakefield into easy communication with the Park System and the parkways towards Boston, and would also make it easy for the people of the rest of the District to reach Wakefield's very attractive parks.

Certain other facts will be useful in considering the relation which the parkways here described will bear to the entire Metro-

politan Park System. This system is being provided, in accordance with a report and general plan presented to the Legislature in 1893, and is designed to be an adequate and complete system for the entire Metropolitan Parks District. The State House is at the centre of this District, and Charles River is the natural dividing line between its northerly and southerly halves. The generous legislation since 1893 has enabled this Board to carry out practically all of the plan in the southerly half of the District and a considerable part of the plan in the northerly half. As a result, the reservations and parkways south of Charles River, uniting with the Boston park system, form a very complete and well-connected system, with that river as a base, from which Nantasket Beach alone, at the extreme south-east corner of the District, stands remote and unconnected.

The northerly half of the Metropolitan Park System, however, lacks the completeness of the southern half. Between the reservations and parkways already provided several gaps remain. From Charles River to Fellsway there is no connecting parkway, although the Legislature has specifically directed this Commission, by chapter 273 of the Acts of 1899, to consider and report upon the feasibility of providing a parkway to fill this gap. Middlesex Fells is at the end of a parkway provided for from Charles River to the Mystic lakes and also at the end of Fellsway. Revere Beach is connected with Fellsway and Mystic River by the Revere Beach Parkway. Between Middlesex Fells, Fellsway, Revere Beach Parkway and Revere Beach is nearly one-fourth of the entire territory of the Metropolitan Parks District, untouched by any portion of the Metropolitan Park System. At the extreme north-easterly corner stands Lynn Woods, balancing, in that northern half of the District, the great Blue Hills Reservation in the southern half of the District. When the general plan for a Metropolitan Park System was outlined, in 1893, Lynn Woods, although a local park, like Boston parks, was regarded as always to be one of the most attractive and important open spaces of the District. There is no reason to change the opinion then held. In this reservation the charm of wildness and great area remains unbroken save by the roads which reveal the beauty of its ponds and great rock masses. Its boundary hills rise abruptly from the busy streets of Lynn, so that hardly more than a step from the noise of shop and factory is to be found a restfulness like that of the deep forest.

The city of Lynn, containing over 60,000 inhabitants, is the third largest city of the Metropolitan Parks District; yet, like its great woods park, it stands remote and apparently unconnected with the rest of the Metropolitan Parks District. The suggested



COMMONWEALTH OF MASSACHUSETTS METROPOLITAN PARK COMMISSION
PLAN OF PROPOSED CONNECTIONS
BETWEEN
MIDDLESEX FELLS RESERVATION
LYNN WOODS AND POINT OF PINES
1900

SCALE OF MILES
0 1 2

Wm T. Pierce, Engineer.

Proposed connections shown thus



parkways from Revere Beach to Lynn Woods and from Lynn Woods to Middlesex Fells would connect Lynn and its great reservation with the rest of the District and Park System, provide an entrance and outlet for the northerly end of Revere Beach, and, except for the gap between Mystic River and Charles River, unite the reservations and parkways north of Charles River into a well-connected system, similar to that in the southerly half of the District, from which the shore reservations at Swampscott and Lynn, like Nantasket Beach in the extreme south-east of the District, would alone stand remote and unconnected.

Respectfully submitted,

WILLIAM B. DE LAS CASAS, *Chairman*,
EDWIN B. HASKELL,
EDWIN U. CURTIS,
DAVID N. SKILLINGS,
ELLERTON P. WHITNEY,

Metropolitan Park Commissioners.

FINANCIAL STATEMENT.

DEC. 1, 1899, TO DEC. 1, 1900.

Metropolitan Parks Loan,	\$6,205,000 00
Receipts from bath-house, sales, etc.,	154,679 77
	<hr/>
	\$6,359,679 77

Expenditures.

General expense:—

Engineering pay rolls,	\$692 02
Engineering expenses,	377 84
Landscape Architects, fees,	330 00
Landscape Architects, ex- penses,	171 17
Legal,	2,705 20
Claim department,	1,356 66
Salaries:—	
Commissioners,	6,900 00
Supervisor of Construc- tion,	208 34
General office,	496 66
Rent,	461 03
Stationery,	82 55
Travelling expenses,	33 00
Telephones,	62 60
Miscellaneous,	11 82

\$13,888 89

Blue Hills Reservation:—

Land,	\$3,720 00
Construction (labor and materials),	5,236 01
Police,	607 53
Engineering pay rolls,	1,046 18
Engineering expenses,	185 56
Landscape Architects, fees,	100 00
Landscape Architects, ex- penses,	57 12
Legal,	445 20
Repairs of roads,	104 55
Keep of horses,	124 96
Experts,	150 00

<i>Am'ts carried forward,</i>	\$11,777 11	\$13,888 89	\$6,359,679 77
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Am'ts brought forward, \$11,777 11 \$13,888 89 \$6,359,679 77

House (partial), . . .	3,095 06
Boats,	325 10
General supplies, . . .	29 31
Repairs,	75 94
Fence,	39 80
Bound stones,	56 00
Miscellaneous,	59 33

15,457 65

Middlesex Fells Reservation:—

Land,	\$1,220 50
Construction (labor and materials),	6,708 98
Police,	794 00
Engineering pay rolls, .	1,399 45
Engineering expenses, .	29 38
Landscape Architects, fees,	200 00
Landscape Architects, expenses,	45 35
Legal,	648 41
Repairs of roads, . . .	71 20
Keep of horses,	106 35
House (partial),	2,144 77
Land experts,	25 00
Bridge,	189 52
General supplies, . . .	179 03
Bound stones,	130 10
Stove,	13 00
Miscellaneous,	17 47

13,922 51

Revere Beach Reservation:—

Land,	\$103 00
Construction (labor and materials),	1,444 33
Police,	701 75
Engineering pay rolls, .	625 96
Engineering expenses, .	33 69
Legal,	145 24
Land experts,	3,175 85

Bath-house:—

Pay rolls, \$15,024 80
Bathing suits, 1,049 58
Stockings, . 263 35
Findings, . 124 50

Am'ts carried

forward, \$16,462 23 \$6,229 82 \$43,269 05 \$6,359,679 77

Am'ts brought

<i>forward,</i>	\$16,462 23	\$6,229 82	\$43,269 05	\$6,359,679 77
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Coal, . . .	922 92			
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Lighting, . . .	981 62			
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Engine room, . . .	191 75			
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Hardware, . . .	229 72			
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Stationery, . . .	160 26			
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Repairs, . . .	141 91			
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Paint, . . .	160 27			
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Tickets, etc., . . .	146 05			
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Medicines and				
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attendance, . . .	224 13			
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Lumber, etc., . . .	173 02			
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Supplies, . . .	297 02			
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Raising grade, . . .	1,355 01			
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Uniforms, . . .	127 15			
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Catch-basins, . . .	58 00			
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Hose, . . .	47 19			
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Water rates, . . .	47 41			
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Furniture, . . .	44 66			
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Wash trays, . . .	25 00			
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Keys, . . .	23 20			
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Grill work, . . .	28 00			
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Rubber rings, . . .	20 00			
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Bathing caps, . . .	12 00			
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Lock switches, . . .	12 50			
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Money bags, . . .	12 00			
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Miscellaneous, . . .	97 90			
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	<hr/>	22,000 92		
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Electric wiring, . . .		1,200 00		
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Stable, . . .		174 06		
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Replastering cells, . . .		85 00		
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Lighting, . . .		142 26		
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Keep of horses, . . .		29 15		
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General supplies, . . .		24 72		
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Miscellaneous, . . .		84 30		
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	<hr/>		29,970 23	
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Stony Brook Reservation:—

Land, . . .	\$9,478 34			
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Construction (labor and materials), . . .	831 37			
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Police, . . .	107 25			
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Engineering pay rolls, . . .	337 84			
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Engineering expenses, . . .	43 25			
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Landscape Architects, fees, . . .	25 00			
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Landscape Architects, expenses, . . .	33 91			
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<i>Am'ts carried forward,</i>	\$10,856 96	\$73,239 28	\$6,359,679 77	
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<i>Am'ts brought forward,</i>	\$10,856 96	\$73,239 28	\$6,359,679 77
Legal,	149 04		
Land experts,	575 00		
Repairs,	25 55		
Miscellaneous,	29 78		
	<hr/>	11,636 33	

Beaver Brook Reservation:—

Construction (labor and materials),	\$97 45		
Engineering pay rolls, .	27 60		
Engineering expenses, .	45		
Landscape Architects, expenses,	1 27		
Reflector lantern, . .	13 70		
Miscellaneous,	14 06		
	<hr/>	154 53	

Hemlock Gorge Reservation:—

Land,	\$6,154 00		
Construction (labor and materials),	617 15		
Engineering pay rolls, .	46 63		
Engineering expenses, .	70		
Landscape Architects, expenses,	1 96		
Legal,	2 29		
Land experts,	50 00		
Miscellaneous,	21 89		
	<hr/>	6,894 62	

Charles River Reservation:—

Land,	\$191,851 00		
Construction (labor and materials),	7,133 38		
Engineering pay rolls, .	3,187 52		
Engineering expenses, .	136 80		
Landscape Architects, fees, .	180 00		
Landscape Architects, expenses,	28 89		
Legal,	3,460 78		
Land experts,	7,998 10		
Naphtha launch and fittings,	868 00		
Advertising rules, . .	101 75		
Boats,	105 00		
	<hr/>		
<i>Am'ts carried forward,</i>	\$215,051 22	\$91,924 76	\$6,359,679 77

Am'ts brought forward, \$215,051 22 \$91,924 76 \$6,359,679 77

Alterations in office build-

ing,	285 34
Bound stones,	67 20
Lighting,	68 00
Miscellaneous,	39 87

215,511 63

Neponset River Reservation:—

Land,	\$58,583 89
Construction (labor and materials),	1,112 90
Engineering pay rolls, .	3,313 66
Engineering expenses, .	213 30
Landscape Architects, fees,	125 00
Landscape Architects, expenses,	142 15
Legal,	7,344 90
Land experts,	3,076 00
Signs,	265 50
Bound stones,	465 50
Travelling expenses, .	52 65
Fence,	12 38
Plans,	23 36
Miscellaneous,	24 70

74,755 89

Mystic River Reservation:—

Land,	\$66,928 50
Engineering pay rolls, .	1,017 63
Engineering expenses, .	19 73
Landscape Architects, fees,	110 00
Landscape Architects, expenses,	84 12
Legal,	4,698 65
Land experts,	665 00
Bound stones,	637 80
Photographs,	124 00
Plans,	36 61
Miscellaneous,	40 00

74,362 04

Lynn Shore Reservation:—

Land,	\$80,191 40
Engineering pay rolls, .	351 09

Am'ts carried forward, \$80,542 49 \$456,554 32 \$6,359,679 77

<i>Am'ts brought forward,</i>	\$80,542 49	\$456,554 32	\$6,359,679 77
Engineering expenses, .	93 91		
Landscape Architects, ex-			
penses,	5 35		
Legal,	227 77		
Bound stones, . . .	41 80		
Miscellaneous, . . .	4 90		
	<hr/>	80,916 22	

Quincy Shore Reservation:—

Land,	\$31,019 00		
Construction (labor and			
materials),	33 25		
Engineering pay rolls, .	1,653 93		
Engineering expenses, .	62 47		
Legal,	1,535 21		
Land experts, . . .	1,040 00		
Bound stones, . . .	205 50		
Photographs, . . .	52 00		
Plans,	24 56		
	<hr/>	35,625 92	

Winthrop Shore Reservation:—

Land,	\$19,984 00		
Construction (labor and			
materials),	103,373 46		
Police,	371 75		
Engineering pay rolls, .	5,485 48		
Engineering expenses, .	228 62		
Legal,	1,083 09		
Bridge,	4,887 00		
Land experts, . . .	410 00		
Bound stones, . . .	76 00		
Plans,	10 32		
Photographs, . . .	10 00		
Miscellaneous, . . .	13 50		
	<hr/>	135,933 22	

King's Beach Reservation:—

Construction (labor and			
materials),	\$400 00		
Engineering pay rolls, .	76 75		
Engineering expenses, .	1 00		
Legal,	10 00		
Bound stones, . . .	19 00		
	<hr/>		
<i>Am'ts carried forward,</i>	\$506 75	\$709,029 68	\$6,359,679 77

<i>Am'ts brought forward,</i>	\$506 75	\$709,029 68	\$6,359,679 77
Travelling expenses, . . .	10 00	.	.
Miscellaneous, . . .	25	.	.
	<hr/>	517 00	
		<hr/>	
		\$709,546 68	
Amounts charged to Dec. 1, 1899, . . .	5,333,408 91	.	.
Sinking fund assessment for 1899, . . .	64,224 00	.	.
Interest,	28,318 61	.	.
	<hr/>		6,135,498 20
		<hr/>	
Balance in hands of State Treasurer, . . .	.	.	\$224,181 57
			<hr/>
Metropolitan Parks Loan, Series II., . . .	.	.	\$3,025,000 00
Receipts from sales, etc., . . . . .	.	.	21,717 77
			<hr/>
			\$3,046,717 77

Expenditures.

General expense:—

Engineering pay rolls, . . .	\$3,115 58		
Engineering expenses, . . .	1,037 01		
Landscape Architects, fees, . . .	1,760 00		
Landscape Architects, ex- penses,	995 00		
Legal,	2,695 02		
Claim department, . . .	2,176 69		
Supervisor of construction, . . .	208 34		
Salaries,	65 00		
Rent,	466 18		
Stationery,	137 28		
Office expenses,	70 46		
Maps, plans, etc., . . .	98 36		
Typewriter and desk, . . .	114 75		
Miscellaneous,	34 20		
	<hr/>	\$12,973 87	

Blue Hills Parkway:—

Land,	\$1,626 00		
Construction (labor and materials),	28,230 02		
Police,	175 00		
Engineering pay rolls, . . .	2,533 63		
Engineering expenses, . . .	128 18		
Landscape Architects, fees, . . .	6 25		
Landscape Architects, ex- penses,	68 82		
	<hr/>		
<i>Am'ts carried forward,</i>	\$32,767 90	\$12,973 87	\$3,046,717 77

<i>Am'ts brought forward,</i>	\$32,767 90	\$12,973 87	\$3,046,717 77
Legal,	102 93		
Land experts,	100 00		
Repairs of road, . . .	5,761 57		
Fencing,	1,446 00		
Engineering expert, . .	75 00		
Lighting,	337 50		
Bound stones,	95 00		
Miscellaneous,	20 60		
	<hr/>	40,706 50	

Middlesex Fells Parkway:—

Land,	\$4,900 40		
Construction (labor and materials),	2,761 40		
Police,	371 25		
Engineering pay rolls, .	850 43		
Engineering expenses, .	15 35		
Landscape Architects, fees,	6 25		
Landscape Architects, expenses,	10 35		
Legal,	432 00		
Land experts,	2,288 49		
Special repairs (water main),	834 93		
Lighting,	1,023 86		
James B. Webster (claim for personal injuries), .	174 85		
Telephones,	23 75		
Fence,	19 55		
Miscellaneous,	14 00		
	<hr/>	13,726 86	

Mystic Valley Parkway:—

Land,	\$16,075 25		
Construction (labor and materials),	9,286 91		
Police,	292 25		
Engineering pay rolls, .	889 68		
Engineering expenses, .	39 03		
Landscape Architects, fees,	156 25		
Landscape Architects, expenses,	81 96		
Legal,	40 39		
Lighting,	440 89		
Loam,	520 80		

<i>Am'ts carried forward,</i>	\$27,823 41	\$67,407 23	\$3,046,717 77
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<i>Am'ts brought forward,</i>	\$27,823 41	\$67,407 23	\$3,046,717 77
Water rates,	41 38		
Miscellaneous,	76 53		
	<hr/>	27,941 32	
Revere Beach Parkway:—			
Land,	\$160,883 82		
Construction (labor and materials),	127,155 67		
Police,	70 00		
Engineering pay rolls, .	7,777 82		
Engineering expenses, .	414 93		
Landscape Architects, fees,	200 00		
Landscape Architects, expenses,	262 40		
Legal,	6,943 58		
Land experts,	1,785 00		
Town of Revere on account of relocating of Ocean Avenue sewer,	5,000 00		
Loam,	698 10		
Installing lights, . . .	203 60		
Photographs,	116 00		
Bound stones,	64 60		
Miscellaneous,	28 55		
	<hr/>	311,604 07	
Neponset River Parkway:—			
Engineering pay rolls, .	\$473 56		
Engineering expenses, .	4 50		
Landscape Architects, fees,	225 00		
Landscape Architects, expenses,	51 33		
Land experts,	75 00		
	<hr/>	829 39	
Fresh Pond Parkway:—			
Land,	\$23,053 21		
Construction (labor and materials),	17,898 32		
Engineering pay rolls, .	1,912 17		
Engineering expenses, .	82 80		
Landscape Architects, fees,	10 00		
Landscape Architects, expenses,	21 80		
Legal,	153 85		
Land experts,	50 00		
Fence,	251 18		
	<hr/>		
<i>Am'ts carried forward,</i>	\$43,433 33	\$407,782 01	\$3,046,717 77

Am'ts brought forward, \$43,433 33 \$407,782 01 \$3,046,717 77

Stone bounds, . . .	44 80	
Miscellaneous, . . .	9 65	
	<hr/>	43,487 78

Furnace Brook Parkway: —

Land,	\$1,044 00	
Engineering pay rolls, .	379 47	
Engineering expenses, .	1 18	
Landscape Architects, fees,	50 00	
Landscape Architects, ex-		
penses,	17 59	
Legal,	1,057 05	
Land experts,	100 00	
Miscellaneous,	14 73	
	<hr/>	2,664 02

Lynnway: —

Engineering pay rolls, .	\$39 76	
Engineering expenses, .	05	
	<hr/>	39 81

Charles River Speedway: —

Construction (labor and materials),	\$35,514 32	
Engineering pay rolls, .	2,210 91	
Engineering expenses, .	261 51	
Landscape Architects, fees,	256 25	
Landscape Architects, ex-		
penses,	211 91	
Police,	634 65	
Loam,	7,186 20	
Cinders,	3,381 21	
Gravel,	597 86	
Stone,	141 00	
Filling,	415 62	
Headquarters building, bal-		
ance,	480 88	
Water supply connection, .	133 33	
Watering,	105 37	
Stand pipes,	68 00	
Stone bounds,	225 00	
Paving,	396 00	
Keep of horses,	158 16	
Telephones,	26 15	
Supplies,	109 10	
Watering trough, . . .	64 20	

<i>Am'ts carried forward,</i>	\$52,577 63	\$453,973 62	\$3,046,717 77
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<i>Am'ts brought forward,</i>	\$52,577 63	\$453,973 62	\$3,046,717 77
Chestnut posts, . . .	27 00		
Miscellaneous, . . .	22 14		
	<hr/>	52,626 77	
Middlesex Fells Roads:—			
Construction (labor and materials), . . .	\$3,707 78		
Engineering expenses, . . .	21 46		
Advertising, . . .	118 32		
	<hr/>	3,847 56	
Stony Brook Roads:—			
Construction (labor and materials), . . .	\$295 80		
Engineering pay rolls, . . .	153 70		
Engineering expenses, . . .	75		
	<hr/>	450 25	
Middlesex Fells and Lynn Woods:—			
Engineering pay rolls, . . .	\$145 20		
Engineering expenses, . . .	23 00		
Landscape Architects, fees, . . .	25 00		
Landscape Architects, expenses, . . .	10 65		
Miscellaneous, . . .	3 92		
	<hr/>	207 77	
		<hr/>	
		\$511,105 97	
Amounts charged to Dec. 1, 1899, . . .		1,904,513 84	
Sinking fund assessment for 1899, . . .		15,396 00	
One-half interest, . . .		22,327 68	
		<hr/>	
			2,453,343 49
Balance in hands of State Treasurer, . . .			\$593,374 28
			<hr/>
Nantasket Beach Loan, . . .			\$600,000 00
Receipts, rents, etc., . . .			4,975 00
			<hr/>
			\$604,975 00

Expenditures.

Land, . . .	\$434,788 83		
Construction (labor and materials), . . .	9,836 52		
Engineering department, pay rolls, . . .	989 46		
Engineering department, expenses, . . .	176 15		
Landscape Architects, fees, . . .	50 00		
Landscape Architects, expenses, . . .	4 48		
Legal, . . .	1,074 27		
Land experts, . . .	3,665 00		
Watering, . . .	713 65		
	<hr/>		
<i>Am'ts carried forward,</i> . . .	\$451,298 36	\$604,975 00	

<i>Am'ts brought forward,</i>	\$451,298 36	\$604,975 00
Lighting,	763 63	
Alterations and repairs on buildings,	6,088 60	
Painting,	719 50	
Sewer,	360 00	
Papering,	80 00	
Cell,	218 00	
Hot-water apparatus,	728 00	
Setting glass,	126 01	
Furniture,	739 56	
Shades,	43 60	
Screens,	46 00	
Piping (hotel to café),	75 86	
Iron work,	170 23	
Installing lights in dormitory,	144 05	
Watchmen's clocks,	150 00	
Water rates,	190 00	
Hose reel,	582 00	
Hose,	47 00	
Photographs,	132 00	
Curtains, band stand,	49 00	
Drinking fountain,	47 36	
Rubbish barrels,	39 65	
Electrical work,	205 55	
Advertising,	268 87	
Setting electric light pole,	50 00	
Buoys,	28 50	
Dory,	29 68	
Medicines,	18 29	
Bound stones,	47 50	
Miscellaneous,	116 70	
	<hr/>	
	\$463,603 50	
Amount charged to Dec. 1, 1899,	2,471 96	
	<hr/>	
		466,075 46
		<hr/>
Balance in hands of State Treasurer,		\$138,899 54
		<hr/>

METROPOLITAN PARKS SYSTEM MAINTENANCE.

Appropriation, \$88,500 00

Expenditures.

General expense:—

Salaries, \$6,165 34
 Apportionment commission, 3,366 62

<i>Am'ts carried forward,</i>	\$9,531 96	\$88,500 00
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<i>Am'ts brought forward, .</i>	\$9,531 96		\$88,500 00
Rent,	2,252 78		
Stationery and printing, .	1,240 15		
Maps, plans, etc., . .	527 08		
Travelling expenses, . .	194 22		
Telephones,	119 04		
Office expenses,	233 77		
Typewriter,	55 00		
Typewriting,	49 00		
Towel supply,	33 90		
Desk,	32 00		
Photographs,	27 95		
Police,	61 80		
Filing cabinets,	30 00		
Ice,	15 97		
Desk chair,	8 00		
Table,	12 80		
Wardrobe,	11 50		
Painting walls,	9 00		
Taking down and storing awnings,	13 25		
Repairs,	9 35		
Frames,	11 25		
Rubber stamps,	9 85		
Miscellaneous,	34 17		
	<hr/>	\$14,523 79	

Blue Hills Reservation :—

Labor,	\$7,169 46		
Police,	6,501 26		
Repairs of roads,	1,224 21		
Keep of horses,	1,382 24		
Horses, carriages, etc., .	973 96		
General supplies,	547 49		
Telephones,	157 31		
Fire extinguishers, . . .	185 05		
Repairs,	152 75		
Moving office,	50 00		
Chimney in stable,	70 30		
Furniture,	60 72		
Water rates,	39 25		
Cesspool,	30 00		
Wire fence,	31 30		
Travelling expenses, . . .	21 33		
Hemlock seedlings,	14 35		
Signs,	13 50		
	<hr/>	<hr/>	<hr/>
<i>Am'ts carried forward, .</i>	\$18,624 48	\$14,523 79	\$88,500 00

<i>Am'ts brought forward, .</i>	\$18,624 48	\$14,523 79	\$88,500 00
Maps, plans, etc.,	5 67		
Stationery,	2 95		
Express,	4 70		
Ticket punch,	2 25		
Miscellaneous,	34 65		
	<hr/>	18,674 70	

Middlesex Fells Reservation:—

Labor,	\$4,912 66		
Police,	6,325 92		
Repairs of roads,	2,707 96		
Lighting,	429 84		
General supplies,	617 31		
Keep of horses,	343 47		
Horses, carriages, etc., .	191 07		
Telephones,	95 90		
Repairs,	204 45		
Photographic materials, .	64 34		
Travelling expenses, . .	57 29		
Grass seed,	42 84		
Drain pipe,	30 00		
Fertilizer,	26 00		
Iron beams,	19 93		
Signs,	18 70		
Stationery,	17 56		
Water rates,	16 50		
Express,	15 16		
Water tank, etc.,	12 40		
Maps, plans, etc.,	10 82		
Money bag,	6 00		
Miscellaneous,	10 56		
	<hr/>	16,176 68	

Revere Beach Reservation:—

Labor,	\$2,891 25		
Police,	10,237 70		
Repairs of roads,	608 00		
Watering,	644 20		
Lighting,	2,197 12		
General supplies,	327 64		
Keep of horses,	331 50		
Horses, carriages, etc., .	209 45		
Telephones,	253 64		
Repairs,	196 05		
Ice,	120 85		
Advertising,	97 50		
	<hr/>	<hr/>	<hr/>
<i>Am'ts carried forward, .</i>	\$18,114 90	\$49,375 17	\$88,500 00

<i>Am'ts brought forward, .</i>	\$18,114 90	\$49,375 17	\$88,500 00
Travelling expenses, . . .	37 20		
Bathing checks, . . .	45 30		
Water rates, . . .	25 00		
Canvas cover for shelter, .	23 50		
Stationery, . . .	14 65		
Physician's services, . .	14 00		
Express, . . .	12 80		
Brushes and combs, . .	10 80		
Frames, . . .	8 90		
Maps, plans, etc., . . .	6 39		
Photographs, . . .	8 00		
Dials for clock, . . .	6 00		
Oars, . . .	5 40		
Sand, . . .	4 50		
Water cooler, . . .	3 50		
Signs, . . .	3 50		
Starting post clock, . .	3 20		
Miscellaneous, . . .	19 13		
	<hr/>	18,366 67	

Stony Brook Reservation:—

Labor,	\$2,686 65		
Police,	1,208 09		
Repairs of roads, . . .	76 85		
General supplies, . . .	294 51		
Keep of horses, . . .	157 36		
Horses, carriages, etc., .	21 51		
Telephones,	19 43		
Water rates,	62 00		
Signs,	58 79		
Repairs,	57 02		
Wire fence,	49 29		
Travelling expenses, . .	36 00		
Grass seed,	35 84		
Maps, plans, etc., . . .	24 02		
Flag,	6 50		
Stationery,	6 30		
Bases for ball field, . .	6 00		
Miscellaneous,	10 54		
	<hr/>	4,816 70	

Beaver Brook Reservation:—

Labor,	\$1,129 60		
Police,	33 95		
Keep of horses,	153 22		
General supplies,	108 11		
	<hr/>		
<i>Am'ts carried forward, .</i>	\$1,424 88	\$72,558 54	\$88,500 00

<i>Am'ts brought forward,.</i>	\$1,424 88	\$72,558 54	\$88,500 00
Watering,	10 00		
Repairs,	66 35		
Travelling expenses, . .	5 70		
Ash barrels,	5 00		
Chairs,	4 68		
Sewer assessment, . .	4 50		
Stationery,	2 65		
Miscellaneous,	14 53		
	<hr/>	1,538 29	

Hemlock Gorge Reservation:—

Labor,	\$1,113 25		
Police,	127 05		
General supplies, . . .	14 93		
Repairs,	81 23		
Water rates,	29 00		
Travelling expenses, . .	13 05		
Rubbish barrels, . . .	9 75		
Signs,	5 50		
Stationery,	5 35		
Faucet for fountain, . .	3 00		
Express,	2 50		
Miscellaneous,	15 30		
	<hr/>	1,419 91	

Charles River Reservation:—

Labor,	\$3,751 00		
Police,	6,007 59		
Watering,	1,035 77		
Keep of horses,	657 19		
Horses, carriages, etc., .	148 54		
General supplies, . . .	521 16		
Telephone,	119 15		
Maps, plans, etc., . . .	93 50		
Water rates,	93 44		
Life-saving apparatus, .	75 00		
Repairs,	56 20		
Tide gates,	50 00		
Travelling expenses, . .	33 79		
Express,	30 25		
Boat hooks and grapnel irons,	28 75		
Canvas cover for shelter, .	21 21		
Chairs,	17 88		
Life preservers,	19 00		
	<hr/>	<hr/>	<hr/>
<i>Am'ts carried forward,.</i>	\$12,759 42	\$75,516 74	\$88,500 00

<i>Am'ts brought forward, .</i>	\$12,759 42	\$75,516 74	\$88,500 00
Stationery,	17 30		
Ice,	15 75		
Water connection for office,	14 93		
Laundry work,	14 27		
Propeller guard,	10 00		
Steering wheel,	6 90		
Pump, anchor, etc.,	6 95		
Signs,	7 50		
Brass letters,	6 44		
Staffs and penants,	9 00		
Rubbish barrels,	6 35		
Physician's services,	6 00		
Paddles,	6 00		
Rubber stamps,	4 15		
Roller and towels,	4 06		
Money bag,	4 00		
Cork cushions,	3 90		
Blanket,	3 50		
Water tank,	1 49		
Flag staff,	1 15		
Miscellaneous,	65 25		
	<hr/>	12,974 31	
		<hr/>	88,491 05
Balance,			<hr/> <hr/> \$8 95

METROPOLITAN PARKS SYSTEM MAINTENANCE, SERIES II.

Appropriation, \$45,000 00

Expenditures.

General expense:—

Salaries,	\$3,213 68		
Rent,	2,741 31		
Stationery and printing,	885 15		
Office expenses,	740 59		
Maps, plans, etc.,	349 79		
Travelling expenses,	280 52		
Telephones,	67 80		
	<hr/>	\$8,278 84	

Blue Hills Parkway:—

Labor,	\$1,066 14		
Police,	3,107 57		
Watering,	1,912 42		
Lighting,	2,318 31		

Am'ts carried forward, . \$8,404 44 \$8,278 84 \$45,000 00

<i>Am'ts brought forward, .</i>	\$8,404 44	\$8,278 84	\$45,000 00
Horses, carriages, etc., .	352 50		
Telephones,	78 73		
Miscellaneous,	19 68		
	<hr/>	8,855 35	

Middlesex Fells Parkway:—

Labor,	\$2,526 15		
Police,	4,206 48		
Watering,	2,067 00		
Lighting,	5,890 30		
Repairs of roads,	895 45		
Horses, carriages, etc., .	123 76		
General supplies,	89 79		
Telephones,	48 20		
Repairs,	186 13		
Trees,	18 31		
Maps, plans, etc.,	16 75		
Express,	8 70		
	<hr/>	16,077 02	

Mystic Valley Parkway:—

Labor,	\$2,618 70		
Police,	2,630 70		
Watering,	996 45		
Lighting,	2,580 00		
Repairs of roads,	694 50		
Horses, carriages, etc., .	137 38		
General supplies,	72 65		
Telephones,	22 75		
Repairs,	33 79		
Water rates,	15 50		
Maps, plans, etc.,	9 09		
Oars and row locks,	3 37		
Signs,	2 50		
Miscellaneous,	6 30		
	<hr/>	9,823 68	

Revere Beach Parkway:—

Labor,	\$139 63		
Police,	347 30		
Watering,	256 00		
Lighting,	104 70		
Horses, carriages, etc., .	175 00		
General supplies,	23 58		
Changing hydrants,	66 18		
Maps, plans, etc.,	16 70		
	<hr/>		
<i>Am'ts carried forward, .</i>	\$1,129 09	\$33,034 89	\$45,000 00

<i>Am'ts brought forward,.</i>	\$1,129 09	\$33,034 89	\$45,000 00
Advertising,	7 75		
Travelling expenses, . .	6 00		
Repairs,	5 05		
Miscellaneous,	10 95		
	<hr/>	1,158 84	
Neponset River Parkway:—			
Miscellaneous,	\$3 06		
	<hr/>	3 06	
Fresh Pond Parkway:—			
Labor,	\$25 20		
Police,	129 25		
Lighting,	63 67		
General supplies, . . .	17 84		
Advertising,	115 08		
Maps, plans, etc., . .	11 96		
Signs,	6 00		
Barrels,	4 00		
Miscellaneous,	1 95		
	<hr/>	374 95	
Middlesex Fells Roads:—			
Miscellaneous,	\$1 12		
	<hr/>	1 12	
Stony Brook Roads:—			
Repairs of roads, . . .	\$44 80		
	<hr/>	44 80	
Lynnway:—			
Miscellaneous,	\$0 60		
	<hr/>	60	
		<hr/>	44,618 26
Balance,			\$381 74
			<hr/> <hr/>

NANTASKET BEACH MAINTENANCE.

Appropriation,		\$6,500 00
<i>Expenditures.</i>		
Labor,	\$58 19	
Police,	4,932 42	
General supplies,	289 78	
Lighting,	113 10	
Travelling expenses, . . .	56 15	
Telephones,	64 85	
	<hr/>	
<i>Am'ts carried forward,</i>	\$5,514 49	\$6,500 00

<i>Am'ts brought forward,</i>	.	.	.	\$5,514 49	\$6,500 00
Stationery,	.	.	.	.	38 17
Express,	.	.	.	.	74 65
Toilet fixtures and paper,	.	.	.	.	71 50
Fire extinguishers,	.	.	.	.	53 00
Repairs,	.	.	.	.	52 71
Moving building,	.	.	.	.	30 00
Care of office,	.	.	.	.	29 30
Maps, plans, etc.,	.	.	.	.	26 47
Disinfectant,	.	.	.	.	25 00
Ice,	.	.	.	.	13 77
Coal,	.	.	.	.	14 00
Physician's services,	.	.	.	.	17 00
Bathing checks,	.	.	.	.	14 30
Signs,	.	.	.	.	9 64
Mats,	.	.	.	.	6 54
Printing,	.	.	.	.	9 75
Brushes and combs,	.	.	.	.	4 38
Money bag,	4 00
Ash barrels,	3 39
Dials,	3 25
Miscellaneous,	80 46
					<hr/> 6,095 77
Balance,	<hr/> \$404 23 <hr/>

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A.

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